# AMENDED FY 1999 BIENNIAL BUDGET ESTIMATE DEFENSE INFORMATION SYSTEMS AGENCY



DTIC QUALITY INSPECTED 8

# RESEARCH, DEVELOPMENT, TEST & EVALUATION (RDT&E)

R-1, R-2, AND R-3 EXHIBITS

# FEBRUARY 1998

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#### DEFENSE INFORMATION SYSTEMS AGENCY (DISA) PROGRAM ELEMENT COMPARISON SUMMARY INTRODUCTION AND EXPLANATION OF CHANGES

- 1. <u>General</u>. This document has been prepared to provide summary information on the DISA Research, Development, Test and Evaluation Program to congressional committees during the FY 1999 hearings. The R-2 and R-3 exhibits provide narrative information on DISA's RDT&E Program Elements and projects.
- 2. Comparison of FY 1997 and 1998 Data. A direct comparison of FY 1997 and FY 1998 data in the R-1 exhibit dated February 1997 will reveal only changes reflecting below threshold reprogrammings and Congressional action on the appropriation request.
- 3. Relationship of FY 1999 Budget Structure to the FY 1998
  Budget Approved by Congress. The Amended FY 1999 Budget Estimate reflects the following new Program Elements:

PE 0604764K, Advanced Information Technology (IT) Services Joint Program Office. This PE consists of a project previously funded in PE 0303126K. It was realigned to more appropriately reflect the Department's increased emphasis on leading edge IT services.

PE 0605801K, Defense Technical Information Services. This PE is a functional transfer to DISA from DLA by direction of the Defense Reform Initiative.

PE 0303149K, C4I for the Warrior. The two projects in this PE are not new starts. Rather, they are just realignments from other existing program elements.

PE 0303153K, Joint Spectrum Center. This PE is a functional transfer to DISA from Air Force by direction of the Defense Reform Initiative.

4. <u>Classification</u>. All exhibits in this document are unclassified.

Exhibit R-33 Program Element Comparison Summary

### UNCLASSIFIED

# DEFENSE INFORMATION SYSTEMS AGENCY AMENDED FY 1999 BIENNIAL BUDGET ESTIMATE

# RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

## TABLE OF CONTENTS

_	2	2	6	33 Interoperability, PE 0208045K	35	52	126K	Support of the National Communications System (NCS), PE 0303127K	Defense Message System (DMS), PE 0303129K	Minimum Essential Emergency Communications Network (MEECN), PE 0303131K		Joint Spectrum Center, PE 0303153K
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NDT&E Program Summary, R-1	22 Research Center, PE 0305108K.	Advanced Information Technology Services Joint Program Office, PE 0604764K	Defense Technical Information Services, PE 0605801K	ž	VMCS-Wide Support, PE 0302016K	Defense Information Infrastructure (DII) Engineering & Integration, PE 0302019K	Cong-Haul Communications, PE 0303	ୂ	ns	Ē	C4I for the Warrior, PE 0303149K	S
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#### DEFENSE INFORMATION SYSTEMS AGENCY AMENDED FY 1999 BIENNIAL BUDGET ESTIMATE R-1 EXHIBIT

Program Element	FY 1997	FY 1998	FY 1999
0305108K C2 Research	1,814	1,874	1,961
Total Applied Research (BA 2)	1,814	1,874	1,961
0604764K Advanced IT Services Joint Program Office	٥	•	15,588
Total Engineering & Manufacturing Development (BA 5)	0	0	15,588
0605801K Defense Technical Information Services	٥	o	46,469
Total RDIGE Management Support (BA 6)	•	0	46,469
	24,391	24,913	26,296
NMCS-Wide Support	1,950	1,688	1,189
	4,531	4,119	4,975
	22,613	13,693	11,561
0303100: Trement of the Nat. Comm. Sys. (NCS)	3,808	4,405	4,428
	1,353	•	0
0303140% All. Essen. Emerg. Comm. Netw. (MEECN)	2,208	2,242	3,061
	0	0	3,675
ososist oping spectrum Center	0	0	8,839
Total Operational System Develop. (BA 7)	60,854	51,060	64,024
TOTAL DISA RDTER	62,668	52,934	128,042

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RDTGE BUT	RDTGE BUDGET ITEM JUSTIFI	FICATION	CATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02				<b>R-1 ITEM</b> C2 Resea	R-1 ITEM NOMENCLATURE C2 Research/P.E. 0305108K	<b>FURE</b> 0305108K			
COST (in millions)	FY97	FY98	FY99	FY 0 0	FY01	FY02	FY03	Cost to Complete	Total Cost
Command and Control Research/A10	1.814	1.874	1.961	2.000	2.050	2.081	2.119	Contg	Contg

A. Mission Description and Budget Item Justification:

Accordingly, this program element is located in Budget Activity 02. The C2 research program was initiated C2 as a scientific discipline, foster joint service techbase cooperation and demonstrations and develop a C2 emerging technologies, methodologies and theories of military command and control (C2), the application of research This program element represents DISA's portion of a joint DISA/multi-service effort that supports research into results to resolve the problems of C2 associated with joint operations and the optimal use of MILDEP laboratory curriculum for DOD.

University, Naval Post Graduate School and the Service War colleges. It addresses joint techbase issues including joint The project supports command and control basic research and applied research. The project consists of research and studies for high level issues in command and control, and the development of curricula for National Defense distributed ADP, Joint War Gaming, and technology sharing.

## FY1997 Accomplishments:

- Continued coordinating and managing the Joint Service C3 Science and Technology Programs and developing an annual Joint Service Plan for C3 Research. Supported development and execution of the Deputy Director of Research and Engineering (DDR&E) Advanced Concepts Technology Demonstrations (ACTDs) using the Joint Warfare Information Demonstrations (JWID). (2nd Qtr - 3rd Qtr) (\$400K)
  - Continued demonstrations within the Global Grid testbed environment of Distributed Computing Environment(DCE) capabilities in Multi-Media Security and fusion. Incorporated research into JWID arena for demonstration. (3rd Qtr - 4th Qtr) (\$240K)
- Continued C3 Decision Aids and Data Fusion Symposia and the information exchange through the Technical Panels for C3 (TPC3) subpanels. Formalized the expansion into the international arena. Held first international Symposia in Europe. (3rd Qtr - 4th Qtr) (\$315K)
- Continued basic research in (3rd Qtr - 4th Qtr) (\$509K) Continued basic and applied research in C2 architecture's theory and analysis tools. Conditional Event Probability Algebraic Logic and its application to the C3 process.

Page 1 of 3

RDTGE E	BUDGET IT	RDTÆE BUDGET ITEM JUSTIFI		CATION (R-2 Exhibit)	it)			DATE: F	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02					R-1 ITEM C2 Resea	R-1 ITEM NOMENCLATURE C2 Research/P.E. 0305108K	<b>rure</b> 0305108K			
COST (in millions)		FY97	FY98	FY99	FY 0 0	FY01	FY 02	FY03	Cost to Complete	Total Cost
Command and Control Research/Al0	·	1.814	1.874	1.961	2.000	2.050	2.081	2.119	Contg	Contg

# FY1997 Accomplishments (Cont'd):

Continued C2 curricula for National Defense University and other DOD schools and analyses and studies of high level C3 issues (4th Qtr - 4th Qtr)(\$350K) \$1.814M Total

### FY1998 Plans:

- Continue to formalize the international expansion of the Symposia Host the second international C3 Symposia in Europe/UK. (3rd Qtr - 4th Qtr) (\$375K) Continue C3 Decision Aids Data Fusion Symposia. 0
  - (4th Qtr 4th Qtr) (\$240K) Continue development of the C2 reference model and its application.
- Develop applications for Continue basic and applied research in C2 architecture's theory and analysis capability. analyses and tools. (2nd Qtr - 3rd Qtr) (\$530K)
  - Continue development of C2 and Information Warfare related curricula for National Defense University and other DOD (3rd Qtr - 4th Qtr) (\$385K) schools.
- Continue with the establishment of the Advanced Concepts Technology (ACT) program as the DOD center of excellence for lessons learned. Continue analysis and studies of C3 and Information Warfare high level issues. \$1.874M Total (2nd Qtr - 3rd Qtr) (\$344K)

### FY1999 Plans:

- Continue to formalize the international expansion of the Symposia (3rd Qtr - 4th Qtr) (\$380K) Host the third international C3 Symposia in Europe/UK. Continue C3 Decision Aids/Data Fusion Symposia. effort. 0
  - Continue development of the C2 reference model and its application. (4th Qtr 4th Qtr) (\$190K)
- Develop applications for Continue basic and applied research in C2 architecture's theory and analysis capability. (3rd Qtr - 4th Qtr) (\$430K) analyses and tools.
- Continue development of C2 and Information Warfare related curricula for National Defense University and other DOD (3rd Qtr - 4th Qtr) (\$476K) schools.
  - (3rd Qtr 4th Qtr) (\$485K) Continue analysis and studies of high level C3 and Information Warfare issues.

Page 2 of 3

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RDIGE BUDGET ITEM JUSTIFICATION	ITEM JUSTI		(R-2 Exhibit)	it)			DATE: Fe	February 1998	8
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02	·			<b>R-1 ITEM</b> C2 Resea	ITEM NOMENCLATURE Research/P.E. 0305	<b>TURE</b> 0305108K			
COST (in millions)	FY97	FY98	FY99	FY00	FY01	FY 02	FY03	Cost to Complete	Total Cost
Command and Control Research/A10	1.814	1.874	1.961	2.000	2.050	2.081	2.119	Contg	Contg
B. Program Change Summary					FY 9.7	6	8074	000	
Previous President's Budget (FY 1998)	_				1.814		1.937	2.013	
Appropriated Value Adjustments to Appropriated Value					1.856		1.937		
Adjustments to Budget Year since FY 1998		President's Buc	Budget		7.0.1		.003	052	
Current Budget Submit/President's Budget	dget (FY 1999)	(666			1.814		1.874	1.961	
Change Summary Explanation: Funding: FY97 change due to below threshold reprogramming. FY98 change due to Congressional adjustments to the Defense-wide Investment Appropriation. FY99 change due to revised fiscal guidance.	to below threshold reprogra to Congressional adjustment to revised fiscal guidance.	reprogramm justments uidance.	ung. to the De	fense-wid	e Investn	ent Appro	opriation		
C. Other Program Funding Summary: N/A	<b>ا</b> م					•			
D. Schedule Profile									
Contract/study delivered 3rd quarter	FY97								
(U) <u>FY1998</u>									
Contract/study delivered 3rd quarter (U) <u>FY1999</u>	FY 98								
Contract/study delivered 3rd quarter	FY99								
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								DATE: Fe	DATE: February 1998	8
RDTGE B	UDGET IT	RDTEE BUDGET ITEM JUSTIFI	ICATION	(CATION (R-2 Exhibit)	oit)					
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/05					R-1 ITEM PE 06047 Joint Pr	R-1 ITEM NOMENCLATURE PE 0604764K / Advanced Informat Joint Program Office (AITS-JPO)	TURE anced Infe ice (AITS-	ormation -JPO)	R-1 ITEM NOMENCLATURE PE 0604764K / Advanced Information Technology Services Joint Program Office (AITS-JPO)	Services
COST (in millions)		FY97	FY98	FY99	FY00	FY01	FY02	FY 0.3	Cost to Complete	Total Cost
Leading Edge Pilot Information Technology/T26		0	0	0 15.588* 15.420		15.339	,15.253	15.171	Contg	Contg

collaboration capabilities for R&D and Battle Lab communities; (b) engineers and reinforces components for "leave-behind" and transition Budget Activity 5. Leading Edge Services are information transport and value added services not available from the DII and for which customers are willing to assume some of the risk associated with development and initial deployment. These services include information (GCSS); (c) augments transitioning products with improved security, scalability, and DII compliance; and (d) provides advanced, hardened capabilities ("Leading Edge Services") to selected operational beta test sites. As a result, this program element is under Mission Description & Budget Item Justification: The Advanced Information Technology Services Joint Program Office (AITS-JPO), a into the Defense Information Infrastructure (DII), including the Global Command and Control System (GCCS) and Global Combat Support operational support of the warfighter. The AITS-JPO, among other functions: (a) provides advanced technology demonstrations and processing, storage, and retrieval; communications (voice, data, video, multimedia); and security technology and applications in joint DARPA/DISA office, facilitates the transition of DARPA's substantial information systems technology research into DISA's command, control, and intelligence for the worldwide DOD communities.

### (U) FY 1999 Plans:

o Integrate web-based collaboration, logistics Common Operational Picture (COP) enhancements and synchronized ops/log planning into the GCSS Cluster. Support transition of Joint Logistics Advanced Concept Technical Demonstration (ACTD) to Advanced Common Operating o Develop, harden and transition an initial capability for rapid Courses of Action/Time-Phased Force Deployment Data (COA/TPFDD) TPFDD/OPLAN readiness and distributed assessment for GCCS 4.0 with a focus on Joint Staff Joint Operating Planning and general, TPFDD/OPLAN readiness and distributed assessment tor ecco are made and Crises Action Planning and Execution (JOPES/CAPE) reengineering (2nd Qtr - 4th Qtr; \$2,800K). Environment (COE)/GCSS infrastructure (2nd Qtr - 4th Qtr; \$3,000K).

o Integrate an advanced information environment into the DII COE 4.0 which will permit "plug and play" introduction of new capabilities o Focus on high-performance, secure, distributed Common Object Request Broker Architecture (CORBA) services implementation and on and information sharing across diverse networks in support of joint planning and execution (3rd Qtr - 4th Qtr; \$1,588K). integrating broadcast and conventional webs (e.g., Intelink, SIPRnet) (3rd Qtr - 4th Qtr; \$2,260K).

o Provide an enhanced common operational picture which includes broadcast COP, multimedia & video services, reach-back archiving & C4I systems integration with Information Dissemination Management (IDM) services (3rd Qtr - 4th Qtr; \$1,980K).

\* This project is not a new start. This project was realigned from PE 0303126K, Long Haul Communications, project E26.

Page 1 of 4

								DATE: Feb	DATE: February 1998	
RDTEE	BUDGET IS	TEM JUSTIF	ICATION (R	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	_					
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/05					R-1 ITEM PE 06047 Joint Pr	R-1 ITEM NOMENCLATURE PE 0604764K / Advance Joint Program Office	R-1 ITEM NOMENCLATURE PE 0604764K / Advanced Informat Joint Program Office (AITS-JPO)	ormation -JPO)	R-1 ITEM NOMENCLATURE PE 0604764K / Advanced Information Technology Services Joint Program Office (AITS-JPO)	Services
COST (in millions)		FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
Leading Edge Pilot Information Technology/T26		0	0	0 15.588* 15.420	15.420	15.339	15.253	15.171	Contg	Contg
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o Focus on continuous collaborative plan and workflow management, on quantum improvement of the types of distributed planning and assessment capabilities offered in Common Operating Modeling Planning and Simulation Strategy (COMPASS), and on transition of the Joint Composite Strike Element (JCSE) ACTD to multiple service systems (2nd Qtr - 4th Qtr; \$1,800K).

o Provide the basis for integrating C4I and simulation by High Level Architecture (HIA)-compliant collaborative modeling services accessible by C4I applications through the object and multicast infrastructure (2nd Qtr - 4th Qtr; \$2,160K). Total \$15.588M

Develop and implement statements of work and task orders to support FFRDC and SETA Contracts. Acquisition Strategy:

EX98		+15.588	15.588		from PE 0303126K and increased emphasis in this area by the Department of Defense.
딦					ased em
FY97		ident's Budget	FY99)		ect from PE 0303126K and incre
<u>Program Change Summary</u> Previous President's Budget (FY 1998)	Appropriated Value Adjustments to Appropriated Value	Adjustments to Budget Year Since FY98 President's Budget	Current Budget Submit/President's Budget (FY99)	Change Summary Explanation:	FY99 adjustment due to realignment of project
m.					

- C. Other Program Funding Summary: N/A
- D. Schedule Profile
- (U) FY 1999

2nd Quarter - Integrate DARPA joint applications and elements of the Distributed Joint Task Force Architecture and Information Management into the DII to accelerate progress toward the Joint Staff's Advanced Battlefield Information System (ABIS) vision:

This project was realigned from PE 0303126K, Long Haul Communications, project E26. This project is not a new start.

Page 2 of 4

9

								DATE: Fe	DATE: February 1998	
KDT&E B	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	JUSTIF	ICATION	(R-2 Exhib	oit)					
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM	R-1 ITEM NOMENCLATURE	TURE			
RDT&E, Defense Wide/05					PE 06047	64K / Adv ogram Off	PE 0604764K / Advanced Informat Joint Program Office (AITS-JPO)	ormation -JPO}	PE 0604764K / Advanced Information Technology Services Joint Program Office (AITS-JPO)	Services
COST (in millions)		FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to	Total
Leading Edge Pilot Information Technology/T26		0	0	15.588*	15.588* 15.420 15.339	15.339	15.253 15.171	15.171	Contg	Contg

D. Schedule Profile Continued

(U) FY 1999

2nd Quarter

accommodate battlefield awareness, command and control, and modeling and simulation R&D initiatives;

-- align DARPA's C41 architecture approach with DII evolution; and

facilitate maintenance by adapting interfaces to an emerging commercial marketplace.

4th Quarter - Establish a "Virtual Collaboratory," under the auspices of the AITS-JPO, to assist Defense Agencies and Service R&D organizations in integrating advanced C4I applications and technology onto the evolving DII and to support Joint Battle Lab and Joint Warfighting Center evaluations of proposed technology.

Quarter - Complete first-year expansion of the AITS-JPO mission to a greater role in DII technology risk reduction: 4th

Provide "Advanced Information Technology Services" for the R&D and Battle Lab communities at twice FY98 levels;

Engineer and reinforce GCCS and GCSS Leading Edge Services for operational evaluation at twice FY98 levels; and

Augment transitioning products with improved security, scalability, and DII compliance

This project was realigned from PE 0303126K, Long Haul Communications, project E26. This project is not a new start.

Page 3 of 4

		RDICE PROGRAM ELEMENT/PRO	ELEMENT/PROJ	JECT COST BI	COST BREAKDOWN (R-3)	(		DATE: February 1998
APPROPRIATION/BUDGET RDT&E, Defense Wide/(		ACTIVITY 15	·		R-1 PE 0 Join	R-1 ITEM NOMENCLATURE PE 0604764K / Advance Joint Program Office	ICLATURE Advanced Office (P	d Information Technology Services (AITS-JPO)
A: Project C	Project Cost Breakdown (\$Millions)	(\$Millions)		FY97	<u>FY98</u>		FY99	
Project Cost Categories	Categories							
Modeling	Modeling & Simulation	-		0	0		15.588*	
Total							15.588	
B: Budget Ac	quisition His	tory and Plann	Budget Acquisition History and Planning Information:	:uo				
Contractor or Government	Contract Method/Type	Award or	Performing	Project		í		
Activity	Vehicle	Date	EAC	EAC	FY99	FY99	Sudget To	Total Program
Houston	C-CPAF	02/98 TBD				5.000	Contg	Contg
SAIC	C-CPAF	05/97				3.000	Contg	Contg
All Other Contracts	tracts					1.588	Contg	Contg
TOTAL PROJECT						15.588		
* This projec	* This project is not a new start.		roject was real!	lgned from PE	This project was realigned from PE 0303126K, Long Haul Communications, project E26.	4aul Communi	cations, projec	t E26.
				P	Page 4 of 4			

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RDTEE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	T ITEM JUSTI	FICATION	(R-2 Exhib	oit)			DATE: Fek	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense-wide/06				R-1 ITEM Defense T	R-1 ITEM NOMENCLATURE Defense Technical Inf	R-1 ITEM NOMENCLATURE Defense Technical Information Services / 0605801K	Services /	0605801K	
COST (in millions)	EY97	FY98	FY99 *	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Total Program Element Cost			46.469	46.702	45.532	777.44	44.120	Cont.	Cont.
001 Defense Technical Information Center			34.324	34.504	33.275	32.299	31.378	Cont.	Cont.
002 Information Analysis Centers			12.145	12.198	12.257	12.478	12.742	Cont.	Cont.
A. Mission Description and Budget Item Justification: The Defense Technical Information Services Browns Flowert	Item Justif	ication.	The Defe	Tee Techni	cal Info	motion co	rui des B.	mold mense	+ 100

DTIC's concept of operations is to function as the "front" door to DoD unclassified and unlimited information resources for customers internal and external to DoD; as the door to devoted to a particular technology area, are part of the program to share information resources in a coordinated manner contractors, and other federal agencies and their contractors. The Program Element is under BA 6, Mission Support, which provides for the support of operations required for use in general research and development and not allocable to and further leverage the technology base by maintaining a staff of subject experts to provide in-depth analysis and to provides resources for the Defense Technical Information Center (DTIC) and the DoD Information Analysis Centers (IACs) DTIC's mission and function is to provide for the centralized operation of DoD Services for the acquisition, storage, The maintenance of a centralized program is a cost effective and retrieval, and dissemination of Scientific and Technical Information (STI), including data which is restricted, controlled and/or classified. DTIC also functions as the central activity within the DoD for exploring and applying Information Services Program Element The IACs, each advanced techniques and technology to DoD STI systems and for developing improvements in service and STI transfer efficient means to provide access to and transfer information among DoD personnel, DoD contractors and potential controlled information resources for internal DoD use; and as a repository and processor for STI. The Defense Technical effectiveness, and administratively manages the IAC program. create specialized technical information products. controlled and/or classified. specific missions.

of DTIC was transferred from the Director, Defense Research and Engineering to the Director, Defense Information Systems As part of the Defense Reform Initiative, management control \* Projects under this Program Element are not new starts. Agency.

RDTGE BU	UDGET IT	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense-wide/06					R-1 ITEM Defense T	R-1 ITEM NOMENCLATURE Defense Technical Inform	R-1 ITEM NOMENCLATURE Defense Technical Information Services / 0605801K	Services /	0605801K	
COST (in millions)		FY 97	FY98	FY99 *	FY 0 0	FY 0.1	FY02	EOLI	Cost to Complete	Total Cost
001 Defense Technical Information Center				34.324	34.504	33.275	34.324 34.504 33.275 32.299 31.378	31.378	Cont.	Cont.

of information access and sharing. DTIC currently serves more than 4800 organizations located in the U.S. and overseas. of our databases, and have developed and host over 90 web sites, providing more than 96 million accesses per year. The military, universities, managers, scientists, engineers, and contractors look to DTIC for leadership in the advancement observations, findings, recommendations and results derived from DoD endeavors are accessible to authorized users. For others in DoD to help accomplish DoD-related business. DTIC's holdings include technical reports, management summaries at the work unit level, Independent Research and Development summaries, and special collections such as captured German generated by the DoD or information relevant to its mission. DTIC's collection efforts reflect the immediate and longdevelopment management information summaries to our users, in addition to more than .75 million on-line interrogations management, studies and analysis, and other types of information, in any media or format, which meets the needs of the technical information must be readily available and easily transferable. DTIC is moving aggressively to fully exploit <u>dission Description and Budget Item Justification</u>. DTIC collects or electronically connects to sources of information and Japanese documents that date back to World War II. DTIC's role is to ensure that all significant or technological term information needs of the DoD community. The primary focus is on acquiring current documentation and management the United States to maintain its readiness and competitiveness with the industrialized nations, such scientific and the benefits of electronically disseminating its internal collection as well as developing tools to access external That information is then disseminated electronically, on paper, or on other physical media, to latest computer and communications technologies, we annually provide nearly 1.3 million documents and research and summaries to support a DoD component's mission responsibility. DTIC acquires scientific, technical, engineering, databases, and to reach end users (scientists, engineers, R&D managers, etc.) in rapidly increasing numbers. Defense community.

\* This project is not a new start. This project was realigned from DLA PE 0605801S.

Page 2 of 8

RDT&E BU	RDT&E BUDGET ITEM JUSTII	FICATION (R-2 Exhibit)	(R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIEE, Defense-wide/06				R-1 ITEM Defense T	R-1 ITEM NOMENCLATURE Defense Technical Inform	R-1 ITEM NOMENCLATURE Defense Technical Information Services / 0605801K	Services /	0605801K	
COST (in millions)	FY97	FY 98	FY99 *	EY 0 0	FY 0.1	FY02	FY03	Cost to Complete	Total Cost
001 Defense Technical Information Center			34.324	34.324 34.504	33.275	32.299 31.378	31.378	Cont.	Cont.

### T 1999 PLANS

maintenance of equipment, and payment for support services, i.e. personnel processing, building services and maintenance, legal support, etc., paid to other government agencies via Inter-service Support Agreements (1 Qtr - 4 Qtr; Ongoing Operations - Basic operation of DTIC including the output of products and services, personnel, \$29.849 Million).

will identify key government and commercial information resources and present them in a customized, integrated manner to (2 Otr Improved Access, Dissemination and Use of Information - DTIC continues its efforts to improve the capture and retrieval capabilities and electronic delivery of documents. Continue development of a Defense Virtual Library that Operating Capability (FOC) of the Electronic Document Management System. FOC includes implementing new search and distribution of information in the electronic form and to move to paperless information management. Initiate Full Begin efforts to provide classified multimedia products 3 Qtr; \$1.875 Million).

 Business Process Reengineering - Continue management of BPR effort for the Director, Defense Research and Engineering (DDR&E). Efforts consist of reengineering S&T processes to achieve greater mission effectiveness and standardizing business management data to promote interoperability, minimize duplication, and enhance information available to the decision maker at all levels (1 Qtr - 4 Qtr; \$ 2.600 Million).

RDTGE E	BUDGET IT	EM JUSTIF	ICATION	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense-wide/06					R-1 ITEM Defense T	R-1 ITEM NOMENCLATURE Defense Technical Inform	R-1 ITEM NOMENCLATURE Defense Technical Information Services / 0605801K	Services /	0605801K	
COST (in millions)		FY97	FY98	FY99 *	FY00	FY01	FY 02	FY03	Cost to Complete	Total
001 Defense Technical Information Center				34.324	34.504	33.275	32.299	31.378	Cont.	Cont.

B. Program Change Summary:

FY 97 FY 98	FY 99
Previous President's Budget (FY 1998)	0
Appropriated Value	
Adjustment to Appropriated Value	
Adjustment to Budget Year since FY 1998 President's Budget	+34.324
Current Budget Submission/President's Budget (FY 1999)	34.324

Cost in Millions

Change Summary Explanation: This project was realigned to DISA from DLA by direction of the Defense Reform Initiative.

Other Program Funding Summary: No related efforts. <u>:</u>

Page 4 of 8

UNCLASSIFIED

RDIÆE BUDGE	RDT&E BUDGET ITEM JUSTIFICATION (R-2	FICATION (	R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1998	8
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-wide/06				R-1 ITEM Defense T	R-1 ITEM NOMENCLATURE Defense Technical Information Services /	<b>TURE</b> nformation	Services /	0605801K	
COST (in millions)	FY97	FY98	FY99 *	FYOO	FYOI	FY02	FYO3	Cost to Complete	Total Cost
001 Defense Technical Information Center			34.324	34.504	33.275	32.299	31.378	Cont.	Cont.
D. Schedule Profile:				1 2	3 4 1	FY 98 2 3 4	FY 99	4	
Electronic Document Management System (EDMS): Initiate software development for Full Operational	stem (EDMS): Full Operati		Capability						
Defense Virtual Library: Implement Video format Augment User Authentication, encry	encryption and data integrity capabilities	ta integri	ity capab	ilities			All Qtrs All Qtrs	w w	
		д	Page 5 of 8	8					

UNCLASSIFIED

RDT&E BU	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	FICATION	(R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	_
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense-wide/06				R-1 ITEM Defense T	R-1 ITEM NOMENCLATURE Defense Technical Inf	R-1 ITEM NOMENCLATURE Defense Technical Information Services / 0605801K	Services /	0605801K	
COST (in millions)	FY 97	FY98	FY99 *	*FY00	FY01	FY 02	FY03	Cost to Complete	Total Cost
002 Information Analysis Centers			12.145	12.198	12.257	12.478	12.742	cont.	Cont.

and its IAC program are the central source for scientific and technical information and support for the Defense research staffed with subject experts to provide compilation of information, synthesize and evaluate it for relevancy to specific inquiries, supply in-depth analysis services and create specialized technical information products. IACs respond to provides management and oversight of the 13 DTIC funded IACs. The PMO also promotes DoD IAC awareness, acts as liaison provides operational forces technical support. Acquisition functions performed by PMO include initiating and managing Weapons Agency (DSWA) and 13 funded and managed by DTIC. This project funds the basic operations described above for The program office specialized fields to prevent re-inventing research and to promote standardization within these fields. The IACs are support exchange of information among scientists, engineers, and practitioners of disciplines within the scope of the technical inquiries, prepare state-of-the-art reports, handbooks and databooks, perform technology assessments, and attributed to DoD customers recognizing that IACs can be used to synthesize existing information and provide expert chartered by OSD to collect, analyze, synthesize and disseminate worldwide scientific and technical information in operated within the Army (using Army personnel to perform IAC functions), 2 by the Air Force, 1 by Defense Special between government and contractors, writes and implements policy, establishes infrastructure and maintenance, and primary contracting officers' functions and contracting officers' technical representative functional oversight. technical advice resulting in better use of diminishing RDT&E and procurement resources. There are 23 DoD IACS, Mission Description and Budget Item Justification: The IACs are contractor-operated research organizations IAC. The DoD IAC program continues to experience significant growth in work requirements. This growth can be the DTIC managed IACs as well as the IAC Program Management Office (PMO) located at Ft. Belvoir. community and war fighting commands.

This project was realigned from DLA PE 0605801S. This project is not a new start.

Page 6 of 8

RDIGE BUDG	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION	R-2 Exhib	oit)			DATE: Fe.	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense-wide/06				R-1 ITEM Defense	R-1 ITEM NOMENCLATURE Defense Technical Inf	<b>rure</b> Informat	ion Servi	R-1 ITEM NOMENCLATURE Defense Technical Information Services / 0605801K	01K
COST (in millions)	FY97	FY98	FY99 *	FY 0 0	FY01	FY 0.2	FYO3	Cost to Complete	Total
002 Information Analysis Centers			12.145	12.145 12.198	12.257	12.478	12.742	Cont.	Cont.

### FY 1999 PLANS:

- Continue integration of Performance Results Evaluation and Expand database interfaces Management Information System (PREMIS) and Office Filing System (OFS) with the capability to electronically track and incorporated into the IAC program. Conduct competitive procurement of new and existing IACs (1 Qtr - 4 Qtr; \$1.788 and integrate tools for application of information to complete the OFS paperless office environment. Identify and manage government information collections abandoned by disestablished organizations that should be transferred and • Funds personnel and operational costs for the IAC Program Management Office, to include the promotion and generate work unit information and technical report documentation into a seamless process. expansion of IAC awareness in DoD and non-DoD communities. Million).
- Provides basic operational, technical monitor and security office support for each of the DTIC sponsored, contractor operated IACs (\$ 10.357 Million) (1 Qtr - 4 Qtr). Examples of planned accomplishments include:
  - Enhancement and continued monitoring of secure systems.
- Establishment and/or enhancement of foreign exchange of authorized information through links previously established with DoD operational and intelligence communities.
- Acquire and/or incorporate technology to access, receive and/or disseminate information from multiple databases, simultaneously.
- Acquire technology to link the warfighter directly to IAC databases and inquiry services for real-time on-line access.
- Pursue implementation of state of the art electronic technologies to meet requirements of IAC user communities. Implement Information Operations stealth tools to automate and disseminate classified information through
- Pursue, identify, develop and/or implement new and innovative technologies with potential for overcoming existing barriers to information communication among the IAC user communities.

secure networks.

Continue realignment of IACs in support of Defense Technology Objectives within current budget constraints.

Page 7 of 8

RDIGE BUDGET ITEM JUSTIF	ITEM JUSTIF	CATION (	ICATION (R-2 Exhibit)	)it).			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-wide/06				R-1 ITEM Defense	R-1 ITEM NOMENCLATURE Defense Technical Inf	TURE Informat	ion Servi	R-1 ITEM NOMENCLATURE Defense Technical Information Services / 0605801K	301K
COST (in millions)	FY97	FY98	FY99 *	FYOO	FYOI	FY02	FY03	Cost to	Total
002 Information Analysis Centers	-		12.145	12.198	12.257	12.478	12.742	Cont.	Cont.
B. Program Change Summary  Previous President's Budget (FY 1998)  Appropriated Value  Adjustment to Appropriated Value  Adjustment to Budget Year since FY 1998 President's Budget  Current Budget Submission/President's Budget (FY 1999)  Change Summary Explanation:  This project was realigned from DLA to DISA by direction o	1998 Preside 's Budget (F	nt's Budç Y 1999) direction	Jet 1 of the D	Cost in Millions  FY 97 FY 98  "Y 1999)  direction of the Defense Reform Initiative.	Cost in Millions  FY 98  Reform Initiativ		FY 99 0 12.145	·	

Page 8 of 8

c. Other Program Funding Summary: Not applicable.

Schedule Profile: Not Applicable.

UNCLASSIFIED

RDIEE BU	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fel	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	<b>TURE</b> 0208045K			
COST (in millions)	FY97	FY98	FY99	FYOO	FYOI	FY 02	FY03	Cost to Complete	Total Cost
PE: 0208045K	24.391	24.913	26.296	27.807	29.380	30.183	30.975	Contg	Contg
T20 Center for Standards	1.367	1.632	0*	*0	*0	*0	*0	Contg	Contg
T80 Technology Assessment and Insertion	. 598	.582	**0	**0	**0	**0	**0	Contg	Contg
T30 Test and Evaluation	14.832	14.690	17.187	18.191	19.267	19.864	20.432	Contg	Contg
T40 Major Range and Test Facility Base (MRTFB)	7.594	8.009	9.109	9.616	10.113	10.319	10.543	Contg	Contg

# Mission Description & Budget Item Justification:

operational procedures and a test and certification program for C3 systems; and to function as an Operational Test Agency (OTA) to test/certify the Defense Information Systems Network (DISN), Defense Message System (DMS), and other strategic systems. This program element is under Budget Activity 07 because it involves efforts supporting operational To ensure interoperability and integration of Command, Control, Communications and Intelligence (C3I) systems through development and maintenance of a joint global architecture, interface and system standards, interface definitions, systems development.

- \* Project T20, Center for Standards, has been realigned to PE 0303149K, C4I for the Warrior.
- \*\* Project T80, Technology Assessment and Insertion, has been realigned to PE 0303126K, Long Haul Communications, Project T82.

Page 1 of 18

RDT&E BUI	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	<b>FURE</b> 0208045K			
COST (in millions)	FY 97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to	Total
Center for Standards/T20	1.367	1.632	*0	0	0	0	0		Contg
D Mission Description C Dudget the Traffic	1 Thomas 4.								

Mission Description & Budget Item Justification:

primary goal is to guide development of standards within DoD and encourage industry adoption of standards supporting DOD The Center will manage development of demonstrations, and develop the roadmap and business case analyses for transitioning technologies into leading edge The Center serves as DOD Executive Agent for centralized management of Information Technology (IT) standards. requirements. When commercially available standards exist, they will be adopted. The Center will manage de DOD unique requirement efforts. The Center will also select candidate technologies for advanced technology services.

# (U) FY 1997 Accomplishments:

- Commenced update of MIL-STD-187-700C for the DIS (1st Qtr 4th Qtr; \$150K).
- Technical Standards support on Joint and Electronic Key Management Systems (1st Qtr 4th Qtr; \$85K).
  - Explored User/System Developer Standards Requirements (1st Qtr 4th Qtr; \$130K).
- Developed Multicasting Lower Layer 3 Routing Standards (1st Qtr 4th Qtr; \$103K).
  - Enhanced Lower Layer 4 Multicasting Standards (1st Qtr 4th Qtr; \$105K).
- Revised and distributed parts of Joint Pub 6-05 (1st Qtr 4th Qtr; \$240K).
- Completed development of ITU X.400 Key Protocol Standards (1st Qtr 4th Qtr; \$74K).
- Validated and approved Tactical Messaging Standards and initial Thin Stack Standards (1st Otr 4th Otr;
- Validated and approved Tactical Directory Standard (1st Qtr 4th Qtr; \$90K).

0

- Maintained and expanded IT Standards Framework, established a repository of certified DOD IT standards profiles, provided direct standards profile selection support for DOD system (1st Qtr 4th Qtr; \$280K). \$1.367M Total
- Beginning FY99, this project is being realigned to PE 0303149K, C41 for the Warrior, project T20

Page 2 of 18

RDT&E BU	RDT&E BUDGET ITEM JUSTIF	M JUSTIF	ICATION (	FICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	<b>TURE</b> 0208045K			
COST (in millions)		FY97	FY98	FY99	FY00	FY01	FY02	EX03	Cost to Complete	Total Cost
Center for Standards/T20		1.367	1.632	*0	0	0	0	0	0 contg	Contg

### (U) FY 1998 Plans:

- Develop ATM Network-to-Network Interface Standards Profile (1st Qtr 4th Qtr; \$220K).
- Development of SHF, UHF, and EHF SATCOM Standards (1st Qtr 4th Qtr; \$550K).
- Technical support of SATCOM STANAG development (1st Qtr 4th Qtr; \$193K).
  - Technical support to NATO TACOMS 2000 (1st Qtr 4th Qtr; \$200K).
    - Technical support to message (1st Qtr 4th Qtr; \$150K).
- Technical support to PM-Electronic Commerce (1st Qtr 4th Qtr; \$150K).
- Development of standards for Digitized Battlefield (1st Qtr 4th Qtr; \$100K).
- DOD technical requirements for Internet Engineering Task Force (1st Qtr 4th Qtr; \$69K). \$1.632M Total

## Program Change Summary:

	FY97	FX98	FY99
Previous President's Budget (FY98)	1.674	1.632	1.677
Appropriated Value	1.582	1.632	
Adjustments to Appropriated Value	215		
Adjustments to Budget Year Since FY98 President's Budget			
Current Budget Submit/President's Budget (FY99)	1.367	1.632	*0
Change Summary Explanation:			

FY97 decrease is due to below threshold reprogramming.

\* Beginning FY99, this project is being realigned to PE 0303149K, C41 for the Warrior, project T20.

Page 3 of 18

		RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	PEM JUSTIF	CATION (F	(R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRI RDT&E, De	APPROPRIATION/BUDGE: RDI&E, Defense Wide/07	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMENCLATURE C3 Interoperability 0208	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	TURE 0208045K			
SOD	COST (in millions	ions)	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Center f	for Standards/T20	ds/T20	1.367	1.632	*0	0	0	0	0	Contg	Contg
c. <u>Other</u>	r Program	Other Program Funding Summary:		EX97 6.64	E <u>v97</u> 6.642	<u>FY98</u> 10.092	FY99 0*	ដូខ	Total Cost Contg		
D. Sche	Schedule Profile:	:									
FY 1997	1st Qtr: 2nd Qtr: 3rd Qtr: 4th Qtr:	1st Qtr: UHF SATCOM 5KHz DAMA Waveform Standard (V 2nd Qtr: Revised X.500 PICS for Directory Services 3rd Qtr: EHF SATCOM Medium Data Rate (MDR) Data L 4th Qtr: SHF SATCOM Message Format Standard	A Waveform for Direct Data Rate Format St	Standard (Voice) ory Services (MDR) Data Link S andard	(Voice) ces a Link St	<pre>\ Standard (Voice) ory Services (MDR) Data Link Standard, Revision A. andard</pre>	evision A				
FY 1998	All Otrs: 2nd Otr: 3rd Otr: 4th Otr:	Develop VTC Standards Profile for ATM Networks Internet RFC on Common Security Labeling, Internet RFC on COUL Protocol UHF SATCOM Data Control Standard, Revision A EHF SATCOM Low Data Rate Data Link Standard, Revision E	rds Profil mmon Secur ntrol Stan a Rate Dat	e for ATM ity Label dard, Rev a Link St	Networks ing, Inte ision A andard, F	s ernet RFC kevision E	on COUL F	rotocol			

\* Beginning FY99, this project is being realigned to PE 0303149K, C41 for the Warrior, project T20.

Page 4 of 18

	RDTG	RDIKE PROGRAM ELEMENT/PROJECT	LEMENT/PROC	TECT COS	COST BREAKDOWN	DOWN (R-3)	3)		WG	DATE: February 1998	
APPROPRIATION/BUDGET RDT&E, Defense Wide/07		ACTIVITY				<b>R-1</b>	R-1 ITEM NOMENCLATURE C3 Interoperability 0208	ÆNCLATUF bility 02	NE 08045K/Cent	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standards/T20	
A. Project	Project Cost Breakdown: (\$Millions)	<u>4</u> 1: (\$Millic	ons)								
System	Systems Engineering	m				FY97 1.367	FY98 1.632		FY99 0*		
B. <u>Budget A</u> Suppor	Budget Acquisition History and Planning In Support and Management Organizations	istory and nent Organi:	<u>Planning In</u> zations	formation	: <b>u</b> c						
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to	o Budget FY97	Budget FY98	Budget F <u>Y99</u>	Budget to Complete	Total Program	
LOGICON	C/CPFF	08/91				.943			Contg	Contg	
JSE	C/CPFF C/CPAF	·				. 424	1.632		Contg	Contg	
	TOTAL PROJECT	H				1.367	1.632				
In House Engil	In House Engineering & Technical Support: N/A	nical Support	: N/A								
* Beginning F)	Beginning FY99, this project is being realigned to	ect is being	realigned to	PE	149K, C4.	I for the	0303149K, C4I for the Warrior, project T20.	project T	20.		

UNCLASSIFIED

Page 5 of 18

RDTGE E	SUDGET IT	M JUSTIF	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	<b>TURE</b> 0208045K			
COST (in millions)		FY97	FY98	FY 99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
Technology Assessment and Insertion/T80		.598	.582	*0	0	0	0	0	0 Contg	Contg

A. Mission Description & Budget Item Justification:

It provides This project plans and promotes an expeditious and cost effective development of needed information technology capabilities by targeting R&D efforts to DOD mission needs and leveraging on DOD and industry developments. for the transition of new technologies into leading edge and core information services.

### (U) FY 1997 Plans:

- Engineering for Network Engineering Assessment Facility (NEAF) (1st Qtr 4th Qtr; \$265K). 0
- Engineering for ATM systems for Unclassified Internet Protocol Network (NIPRNET) and Global Combat Support System (GCSS) (1st Qtr - 4th Qtr; \$333K). \$.598M Total

### (U) FY 1998 Plans:

- o Engineering for NEAF (1st Qtr 4th Qtr; \$200K).
- Engineering for ATM systems for NIPRNET and GCSS (1st Qtr 4th Qtr; \$382K).

\$.582M Total

\* Beginning FY99, this project is being realigned to PE 0303126K, Long Haul Communication, project T82.

Page 6 of 18

E EDTEE	SUDGET IT	RDT&E BUDGET ITEM JUSTIFI	ICATION (	CATION (R-2 Exhibit)	it)			DATE: Fel	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	<b>TURE</b> 0208045K			
COST (in millions)		FY97	FY98	FY99	FYOO	FY 0.1	FY 02	FY 03	Cost to Complete	Total
Technology Assessment and Insertion/T80		.598	.582	*0	0	0	0	0	Contg	Contg

m m	B. Program Change Summary:				
		FY97	FY98	FY99	
	Previous President's Budget (FY98)	.550	.582	. 598	
	Appropriated Value	.563	.582		
	Adjustments to Appropriated Value	+.035			
	Adjustments to Budget Year Since FY98 President's Budget				
	Current Budget Submit/President's Budget (FY99)	.598	.582	*0	
	Change Summary Explanation:				
	FY97 change due to below threshold reprogramming.				

# C. Other Program Funding Summary: N/A

### D. Schedule Profile:

(U) All Otrs: Engineering for NEAF

Engineering for ATM systems for NIPRNET and GCSS.

age 7 of 18

\* Beginning FY99, this project is being realigned to PE 0303126K, Long Haul Communication, project T82.

	RDT&	RDTEE PROGRAM ELEMENT/PROJECT	LEMENT/PRO.	TECT COS	COST BREAKDOWN	OWN (R-3)	•	i	DA	DATE: February 1998	
APPROPRIATION/BUDGET RDI&E, Defense Wide/07		ACTIVITY			·	R-1 C3 I Inse	R-1 ITEM NOMENCLATURE C3 Interoperability 0208 Insertion/T80	ENCLATU bility 02	RE 08045K/Techi	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Technology Assessment and Insertion/T80	
A. <u>Project (</u> Systems	oject Cost Breakdown: Systems Engineering	wn: (\$Millions	ons)		िंद्य •	<u>FY97</u> .598	FY98	124	FY99 0*		
B. Budget Ac	Budget Acquisition History and Planning Information: Support and Management Organizations	istory and I	Planning In zations	ıformati	: uo						
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>FAC</u>	Prior to	Budget EY97	Budget FY98	Budget FY99	Budget to Complete	Total Program	
All Other Contracts	racts					.598	.582		Contg	Contg	
	TOTAL PROJECT	H				.598	.582				
In House Engineering & Technical Support: N/A	eering & Techr	nical Support	: N/A								
* Beginning FY	Beginning FY99, this project is being realigned to	ect is being	realigned to	PE	126K, Lon	0303126K, Long Haul Communications, project T82.	mmunicatio	ons, proj	ect T82.		

Page 8 of 18

RDTGE B	BUDGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fek	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM ) C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	₽ 0208045K			
COST (in millions)		FY 97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Test and Evaluation/T30		14.832	14.690	17.187	14.690 17.187 18.191 19.267	19.267	19.864	20.432 Contg	Contg	Contg

Tak is performed throughout the entire life cycle including proof-of-concept, system development, system deployment, and system A. <u>Mission Description & Budget Item Justification</u>: Through effective life cycle test and evaluation (T&E), this project ensures that C31 and information systems (IS) developed by DOD Components are interoperable and permit flexible employment of forces throughout the upgrade and modification. This T&E includes interoperability, performance, operational test and evaluation, systems effectiveness and force effectiveness testing of all C31 and IS system standards and system interfaces used in joint and combined operations. world.

## (U) FY 1997 Accomplishments:

In support of Universal Joint Task List (UJTL) tasks SN7.2.4 (Conduct Testing) and SN7.5 (Ensure Interoperability), provided test and systems, simulation to gain insight into system performance which cannot be replicated in an operational test, and desktop studies when Certified that critical requirements are supported by interoperable evaluation of DoD's major C4I programs, to include Defense Message System (DMS), Global Command and Control System (GCCS), Defense Information Systems Network (DISN), and Electronic Commerce (EC). Certified that critical requirements are supported by interoperal users and program managers to provide early warning and solutions to problems. Provided operational test and evaluation of DISA/DoD managed or procured systems, such as GCCS, DMS and DISN. Documented critical operational issues, expressed in terms of operational functionalities and provided the program manager a technical perspective of system capabilities and status. Worked with developers, effectiveness and suitability, through an appropriate test for referral to the decision authority. Utilized stimulation to stress testing is not appropriate. Tested and certified communications systems used by all levels of personnel to include communications facilities transitioning from outdated systems and equipment to DMS compliant and interoperable systems.

integrating DoD systems, and Joint/Combined interfaces to DoD systems in operational environments. Provided real-time warfighter problem and technical resolution support through the use of a 24-hour hot line. Published on a quarterly basis a Lessons Learned Report exercises, such as Tandem Thrust, Roving Sands, Grecian Firebolt, Unified Endeavor and Cobra Gold, real-time operational fixes and problem resolution to CINCs, Services and Agencies. The objective was to provide rapid solutions to C41 problems experienced when o In support of UJTL task SN7.5, Ensure Interoperability, provided C4I exercise and contingency support and assistance during (Oct 96 - Sep 97, \$1.493M) to share C4I problems, issues and solutions.

Page 9 of 18

RDT&E BUD	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	-			R-1 ITEM 1 C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	UE 0208045K			
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Test and Evaluation/T30	14.832	14.690	17.187	17.187 18.191 19.267 19.864	19.267		20.432	Contg	Contg

Mission Description & Budget Item Justification (continued):

# (U) FY 1997 Accomplishments: (Continued)

Chairman, Joint Chiefs of Staff (CJCS) by providing test, certification and evaluation of CJCs systems to ensure interoperability within and between systems, the sustaining base, the National Command Authority, and Service echelons and allies. Systems tested included High Frequency Automatic Link Establishment (HF/ALE), Ultra-High Frequency Demand Access Multiple Assignment (UHF DAMA), major switches, Land Mobile Radio, Intertheater COMSEC Program, Network Management Initiatives, Tactical Data Link (TADIL A, B, J), and US Message Text Format (USMTF). (Oct 96 - Sep 97, \$7.467M) evaluation support for C3I systems. Supported production decisions of the Defense Acquisition Board (DAB) and fielding decisions of the In support of UJTL tasks SN7.2.4 (Conduct Testing) and SN7.5 (Ensure Interoperability), provided testing, certification and \$14.832M Total

### U) FY 1998 Plans

o Provide test and evaluation of DoD's major C41 programs, such as DMS, GCCS, and DISN, by certifying that critical requirements are (Oct 97 - Sep 98, \$5.360M) supported by interoperable functionalities. Evaluate systems' operational effectiveness and suitability for fielding by documenting critical operational issues through an appropriate test, and referring results to the decision authority.

O Support production decisions of the Defense Acquisition Board (DAB) and fielding decisions of the Chairman, Joint Chiefs of Staff (CJCS) by providing test, evaluation and certification of C4I systems to ensure interoperability within and between systems, the sustaining base, the National Command Authority, and Service echelons and allies. (Oct 97 - Sep 98, \$6.220M) o Provide technical and operational support and expertise to CINCs, Services and Agencies during exercises, real world contingencies and operational assessments. Provide Lessons Learned Reports on NIPRNET/SIPRNET addressing current interoperability problems and (Oct 97 - Sep 98, \$3.110M) solutions.

\$14.690M Total

RDIGE B	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	4 JUSTIF	ICATION (	R-2 Exhib	oit)			DATE: Fel	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM 1 C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	UE 0208045K			
COST (in millions)		FY97	FY98	FY99	FYOO	FY01	FY02	FY03 .	Cost to	Total
Test and Evaluation/T30		14.832	14.690	17.187	17.187 18.191 19.267 19.864 20.432	19.267	19.864		Contg	Contg

. Mission Description & Budget Item Justification (continued):

### (U) FY 1999 Plans

Provide test and evaluation of DoD's major C4I programs, such as DMS, GCCS, and DISN, by certifying that critical requirements are supported by interoperable functionalities. Evaluate systems' operational effectiveness and suitability for fielding by documenting critical operational issues through an appropriate test, and referring results to the decision authority. (Oct 98 - Sep 99, \$7.093M)

Support production decisions of the Defense Acquisition Board (DAB) and fielding decisions of the Chairman, Joint Chiefs of Staff
(CJCS) by providing test, evaluation and certification of C4I systems to ensure interoperability within and between systems, the
sustaining base, the National Command Authority, and Service echelons and allies. (Oct 98 - Sep 99, \$6.729M)

o Provide technical and operational support and expertise to CINCs, Services and Agencies during exercises, real world contingencies and operational assessments. Provide Lessons Learned Reports on NIPRNET/SIPRNET addressing current interoperability problems and solutions. (Oct 98 - Sep 99, \$3.365M) \$17.187M Total

Page 11 of 18

UNCLASSIFIED

RDTGE BI	UDGET IT	EM JUSTIF	ICATION	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	oit)			DATE: Fel	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIEE, Defense Wide/07					R-1 ITEM C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	RE 0208045K			
COST (in millions)		FY97	FY98	FY99	FY 0 0	FY01	FY02	FY03	Cost to Complete	Total Cost
Test and Evaluation/T30		14.832	14.690	17.187	18.191	19.267	19.864	20.432	Contg	Contg
B. <u>Program Change Summary</u> Previous President's Budget (FY 1998) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1998 Presi Current Budget Submit/President's Budget (FY 1	(FY 1998) Value Since FY 1	) 1998 Presi iget (FY 1	dent's Budget .999)	get	धितिस से	FY97 15.043 14.449 .383	EY98 15.447 15.447 757 14.690	EY99 16.029 1.158	6 8 6	

Funding: FY97 change due to below-threshold reprogramming.

FY98 change due to Congressional adjustments to Defense-wide Investment Appropriation

FY99 change due to revised fiscal guidance and realignment of funds.

Schedule: N/A Technical: N/A

Other Program Funding Summary: N/A

Page 12 of 18

RDTGE B	SUDGET IT	EM JUSTIF	ICATION (	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM 1 C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	₹ 0208045K			
COST (in millions)		FY97	FY 98	FY99	EY00	FY01	FY02	FY03	Cost to Complete	Total
Test and Evaluation/T30		14.832	14.690	17.187	18.191	19.267	19.864	20.432	Contg	Contg

### . Schedule Profile:

#### (U) FY 1997

- associated training activities of the Navy Computer and Telecommunications Command, support the following programs: BETA and OTEE of Navy unique and DMS joint projects, Multilevel Mail Server, (MMS), Message Distribution Terminal (MDT). In conjunction with DISA's mission to support testing and 2nd Quarter - DMS X.400 project; OT&E of DISN INMS, GCCS and others.
- 4th Quarter Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultra-High Frequency Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VHF standards.

#### (U) FY 1998

- 2nd Quarter DMS X.400 project; OT&E of DISN INMS, GCCS and others. In conjunction with DISA's mission to support testing and associated training activities of the Navy Computer and Telecommunications Command, support the following programs: BETA and OT&E of Navy unique and DMS joint projects, Multilevel Mail Server, (MMS), Message Distribution Terminal (MDT).
- Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDI-1, USMTF and VHF standards. 4th Quarter - Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultra-High Frequency

#### (U) FY 1999

- 2nd Quarter DMS X.400 project; OT&E of DISN INMS, GCCS and others. In conjunction with DISA's mission to support testing and associated training activities of the Navy Computer and Telecommunications Command, support the following programs: BETA and OT&E of Navy unique and DMS joint projects, Multilevel Mail Server, (MMS), Message Distribution Terminal (MDT).
- Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems 4th Quarter - Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultra-High Frequency employing TADILS A/B/C/J, ATDL-1, USMTF and VHF standards.

#### Page 13 of 18

	RD	TEE PROGRAM	RDIÆE PROGRAM ELEMENT/PROJECT	ECT COST	MENT/PROJECT COST BREAKDOWN (R-3)	(R-3)			DATE: Februa	DATE: February 1998	
APPROPRIATIO RDT&E, Defen	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	VITY				R-1 ITEN C3 Inter	ITEM NOMENCLATURE	<b>LATURE</b> ity 020804	5K/Test and	1 ITEM NOWENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	
A. Project	Project Cost Breakdown	(\$ Millions)									
·							FY97	7	FY98	FY99	
C3I Inte	roperability	and Informatic	C3I Interoperability and Information Systems Testing	ting			14.	14.832	14.690	17.187	*
B. Budget A	Budget Acquisition History and Planning Informat	story and Plan	ning Informati	ion							
Test and	Evaluation Organization	anization									
Contractor or	Contract										
Government	Method/Type	Award or	Performing	Project							
Activity	Vehicle	Obligation Date	Activity EAC	office EAC	Prior to EX97	Budget FY97	Budget FY98	Budget FY99	Budget To Complete	Total Program	
POGICON	C-CPAF	08/91	12.772	12.772	12.772	000.	000	000	000.	12.772	
VALIDITY	C-T&M	10/91	5.878	5.878	5.159	.719	000.	000	000	5.878	
*VALIDITY	C-CPAF	02/97	4.480	4.480	000.	.861	1.647	1.972	Contg	Contg	
INTEROP	C-CPAF	08/91	16.088	16.088	15.215	.873	000.	000	000.	16.088	
BDM	CHCPAF	08/91	12.8/0	12.870	000.	1.052	2.013	2.410	Contg	Contg	
* BDM	C-CPAF	02/97	11.880	11.880	000.	1.276	2.440	0000	0000	14.784	
All Other Contracts	tracts				1 371				5	61100	
					1.6.1						
		Subtotal Contracts	racts		48.231	5.851	6.100	7.304	Contg	Contg	
In House Engis	In House Engineering & Technical Support	ical Support									•
		Subtotal In-House	onse			8.981	8.590	9.883			
TOTAL PROJECT						14.832	14,690	17.187			
*New OMNIBUS	*New OWNIBUS contracts obligated in 2nd quarter of FY97.	ated in 2nd qua	rter of FY97.								
					Page 14 of 18	3					

UNCLASSIFIED

							DATE: Fel	DATE: February 1998	
RDTEE BUDGET ITEM JUSTIFI	ITEM JUSTIF	ICATION (	CATION (R-2 Exhibit)	oit)					
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM ) C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	RE 0208045K			
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to	Total
								PATOMINA	2802
Major Range and Test Facility Base (MRTFB)/T40	7.594	8.009	9.109	9.616	10.113	10.319	10.543	Contg	Contg

Indirect operation/maintenance expenses, overall A. <u>Mission Description & Budget Item Justification:</u> This project provides resources to operate DISA's Joint Interoperability Test Command (JITC) which is a member of DOD's Major Range and Test Facility Base (MRTFB). Indirect operation/maintenance expenses, overestbed improvement and modernization, and facility and logistics support are included in this project.

## (U) FY 1997 Accomplishments:

- Corporate Database and other microcomputer applications to provide cost accounting reports to track and catalog customer expenses Continue to refine the automated systems to facilitate test and evaluation and maximize use of test assets; maintain the for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, manpower and fiscal resources; provide base operations business support to JITC's testing mission; (oct 96 - Sep 97, \$1.539M).
- Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; provide other indirect mission support (Oct 96 Sep 97, \$6.055M). \$7.594M Total

### (U) FY 1998 Plans:

- Recurring maintenance of JITC's automated systems to facilitate test and evaluation and maximize use of test assets; maintain the Corporate Database and other microcomputer applications to provide cost accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, manpower and fiscal resources; provide base operations business support to JITC's testing mission; (Oct 97 - Sep 98, \$1.540M).
- Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; provide other indirect mission support (Oct 97 - Sep 98, \$6.469M). \$8.009M Total

Page 15 of 18

RDTGE BU	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	JUSTIF	CATION (	R-2 Exhib	it)			DATE: Fel	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM   C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	UE 0208045K			
COST (in millions)		FY97	FY98	FY99	FYOO	FYOI	FY 0.2	FY03	Cost to Complete	Total Cost
Major Range and Test Facility Base (MRTFB)/T40		7.594	8.009	9.109	9.616	10.113	10.319	10.543	Contg	Contg

1. Mission Description & Budget Item Justification: (Continued)

### (U) FY 1999 Plans:

Recurring maintenance of JITC's automated systems to facilitate test and evaluation and maximize use of test assets; maintain the Corporate Database and other microcomputer applications to provide cost accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, manpower and fiscal resources; provide base operations business support to JITC's testing mission; (Oct 98 - Sep 99, \$1.560M).

Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; provide other indirect test mission support (Oct 98 - Sep 99, \$7.549M). \$9.109M Total

## Program Change Summary

EY99 8.344			.765	9.109
FY98 8.009	8.009			8.009
FY97 7.674	7.674	080		7.594
Previous President's Budget (FY 1998)	Appropriated Value	Adjustments to Appropriated Value	Adjustments to Budget Year Since FY 1998 President's Budget	Current Budget Submit/President's Budget (FY 1999)

Page 16 of 18

RDTGE BUD	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (1	R-2 Exhib	it)			DATE: Fek	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIKE, Defense Wide/07				R-1 ITEM 1 C3 Interol	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	₹ 0208045K			
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY 03	Cost to Complete	Total Cost
Major Range and Test Facility Base (MRTFB)/T40	7.594	8.009	9.109	9.616	9.616 10.113	10.319	10.543 Contg	Contg	Contg

Program Change Summary (Continued)

Change Summary Explanation:

FY97 decrease due to below-threshold reprogramming. FY98 change due to Congressional adjustments to Defense-wide Investment Appropriation.

FY99 change due to revised fiscal guidance and realignment of funds.

. Other Program Funding Summary: N/A

D. Schedule Profile Milestones:

(U) FY 1997 through FY 1999

1st-4th Quarter - BOS and RPMAR and Corporate MIS Database; business process review and improvement; test infrastructure

Page 17 of 18

	RD	TEE PROGRAM	RDIGE PROGRAM ELEMENT/PROJECT		COST BREAKDOWN	(R-3)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET A RDI&E, Defense Wide/07	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	VITX				R-1 ITEM NO C3 Interoper Base (MRIFB)	ITEM NOMENCLATURE Interoperability 020	<b>LATURE</b> .ty 020804	5K/Major Rang	k-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Major Range and Test Facility Base (MRTFB)	
A. Project	Cost Breakdown	1 (\$ Millions)									
Tmprovem	Improvement and Modernization (15M)	nization (TEM)	Δ.				FY97	FY97	FY98	FY99	
	Base Operating Support (BOS)	: (Bos)			•			.927	. 930	. 945	
c. Other In	Other Institutional Expenses	kpenses					6.055	55	6.469	7.549	
TOTAL:							7.594	94	8.009	9.109	
B. Budget A	Budget Acquisition History and Planning Information	story and Plan	ning Informat	ion							
Contractor or	Contract										
Government	Method/Type	Award or	Performing	Project							
Performing Activity	or Funding <u>Vehicle</u>	Obligation <u>Pate</u>	Activity EAC	Office EAC	Prior to FY97	Budget FY97	Budget FY98	Budget FY99	Budget To Complete	Total Program	
LOGICON	C-CPAF	08/91	8.745	8.745	8.545	.200	000	000.	000	8.745	
VALIDITY	C-T&M	10/91	1.325	1.325	1.106	.219	000.	000	000.	1.325	
*VALIDITY	C-CPAF	02/97	2.581	2.581	000.	.510	, 974	1.097	Contg	Contg	
*INTEROP	C-CPAF	08/91	9.996	9.996	9.443	. 553	000.	000.	000	966.6	
BDM	C-CPAF	08/91	8.545	8.545	.000	.400	1.25/	1.816	Contg	Contg 8.545	
*BDM	C-CPAF	02/97	2.414	2.414	000.	.476	.911	1.027	Contg	Contg	
		Subtotal Contracts	tracts			3.015	3.142	3.940	Contg	Contg	
In House Engl	In House Engineering & Technical Support	ical Support									
		Subtotal In-House	House			4.579	4.867	5.169			
TOTAL PROJECT						7.594	8.009	9.109			
*New OMNIBUS	*New OMNIBUS contracts obligated in 2nd quarter of FY 97.	ated in 2nd qua	arter of FY 97.		Page 18 of 18	18					

UNCLASSIFIED

RDIGE BUDG	RDIGE BUDGET ITEM JUSTIF)	ICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM National 1	R-1 ITEM NOMENCLATURE National Military Comman	rure numand Syst	em (NMCS) -	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY97	FY98	FY99	FY 0 0	FY01	FY02	FY03	Cost to Complete	Total
Total Program Element (PE) Cost	1.950	1.688	1.189	1.247	1.312	1.331	1.385	Contg	Contg
NMCS Subsystem Engineering/T50	.361	.306	*0	0	0	0	0	Contg	Contg
NMCS Command Center Engineering/S32	1.202	1.013	1.189	1.247	1.312	1.331	1.385	Contg	Contg
Support to Defense Support Activity (DSA)/Z60	.387	.369	**0	0	0	0	0	0	.756

# Mission Description and Budget Item Justification:

Concentrating on the CINCs, this engineering draws upon improved C2 methodologies and technology insertion opportunities involving US military forces. These efforts emphasize interoperability and are designed to contribute directly to the achievement of the global C41 infrastructure. This program element is under Budget Activity 07 because it involves typing and technology insertions, technical specifications, systems engineering and integration, and technical assess-This program provides concept development, requirements definition, proof-of-principle experiments, rapid protoments for NMCS Command and Control (C2) systems. This support provides informed, decision-making linkage between the to meet the command, control and information system requirements of the CINCs for all crises and security threats National Command Authorities (NCA) and the Commanders-in-Chief (CINC) of the Unified and Specified Commands. efforts supporting operational systems development.

age 1 of 17

<sup>\*</sup> Beginning FY99, this project is being realigned to PE 0303149K, C41 for the Warrlor, project T50.

<sup>\*\*</sup> Beginning FY99, this project is being disestablished by direction of the Defense Reform Initiative.

RDTGE BUDGE	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM National N	R-1 ITEM NOMENCLATURE National Military Comman	<b>TURE</b> Ammand Syst	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
NMCS Subsystem Engineering\T50	.361	.306	*0	0	0	0	0	0 Contg	Contg

. Mission Description & Budget Item Justification:

Combat Support System (GCSS), and Defense Information Infrastructure (DII)). The incorporation of prototypes into Joint provides system engineering support to C4I information systems by developing near-term prototypes to satisfy CINC/Joint This approach also Task Force (JTF) operational requirements. Through this prototyping technical approach, operational requirements are assessed, system performance is measured, system interoperability is demonstrated and standard DISA products are Warrior Interoperability Demonstration (JWID) demonstrations and command exercises provides real-time assessment of premiered in an operational setting (Defense Message System (DMS), Global Command and Control System (GCCS), Global applies to assessing command center capabilities and the implications of DMS, GCCS, GCSS and DII on future command This project To accommodate rapid changes in requirements and increasing budget constraints, new approaches to reduce technological advances and identifies interoperability problems and generates associated solutions. development and integration time, as well as costs for command and control systems must be sought. center requirements.

Page 2 of 17

Beginning FY99 this project is being realigned to PE 0303149K, C4I for the Warrior, project T50.

RDTEE BU	DGET IT	M JUSTIF	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM National P	R-1 ITEM NOMENCLATURE National Military Comman	<b>TURE</b> Ammand Syst	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	·	FY 97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
NMCS Subsystem Engineering\T50		.361	.306	*0	0	0	0	0	0 Contg	Contg

## (U) FY 1997 Accomplishments:

- Integration of additional GCCS functionality, DMS and DII capabilities into JTF prototypes (1st Qtr 4th Otr; \$95K)
  - Technical analysis for operational implementation of EUCOM's Soldier's Digital Assistant (SDA) concept (1st Qtr; \$48K).
    - Assess CINC/JTF prototypes (with DMS, DII capabilities) during major exercises and demonstrations (1st Qtr 3rd Qtr; \$48K).
- EUCOM continued C2 systems integration for CINC/JTFs (1st Qtr; \$73K). 0
- Continued C2 systems integration for CINC/JTFs (1st Qtr 3rd Qtr; \$97K). \$.361M Total 0

#### (U) FY 1998 Plans:

CINC/JTF prototype enhancements via integration of COTS/GOTS capabilities and emerging GCCS and DII technologies (1st Qtr; \$306K). \$.306M Total

\* Beginning FY99, this project is being realigned to PE 0303149K, C4I for the Warrior, project T50.

Page 3 of 17

RDTEE BUI	DGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National	R-1 ITEM NOMENCLATURE National Military Comman	<b>FURE</b> ommand Syst	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016К
COST (in millions)		FY 97	FY98	FY99	FY00	FY01	FY 02	FY03	Cost to Complete	Total Cost
NMCS Subsystem Engineering/T50		.361	.306	*0	0	0	0	0	0 Contg	Contg
B. Program Change Summary:										

	FY97	FY98	FY99	
Previous President's Budget (FY98)	.367	.406	.431	
Appropriated Value	.367	.406		
Adjustments to Appropriated Value	900	100		
Adjustments to Budget Year Since FY98 President's Budget				
Current Budget Submit/President's Budget (FY99)	.361	.306	*0	
Change Summary Explanation:				

FY98 decrease due to Congressional adjustment to Defense-wide investment appropriation. FY97 change due to below threshold reprogramming.

## Other Program Funding Summary:

Related RDT&E: Program Element #0208045K, C3 Interoperability.

#### Schedule Profile:

COM's SDA concept			during major exercises and	
Technical analysis for operational implementation of EUCOM's SDA concept	EUCOM - continued C2 system integration for CINC/JTFs	Continued C2 system integration for other CINC/JTFs	Assess CINC/JTF prototypes (with DMS, DII capabilities) during major exercises and	demonstrations
1st Otr:			3rd Otr:	
FY1997				

\* Beginning FY99, this project is being realigned to PE 0303149K, C4I for the Warrior, project T50.

#### Page 4 of 17

RDTGE B	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	TIFICATION	(R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM National	R-1 ITEM NOMENCLATURE National Military Comman	TURE	em (NMCS) -	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
NMCS Subsystem Engineering/T50	.361	.306	*0	0	0	0	0	0 Contg	Contg .
4+h 0+v.	Integration of additional GCCs functionality, DMG and DIT gamebilities take TMB actions	מטיט [פעטי	fundtions	i + DWG	TTG Pac	1	4		

CINC/JTF prototype enhancements via integration of COTS/GOTS capabilities and emerging GCSS and DII technologies Integration of additional GCCS functionality, DMS and DII capabilities into JTF prototypes. 4th Otr: 1st Qtr:

FY1998

\* Beginning FY99, this project is being realigned to PE 0303149K, C4I for the Warrior, project T50.

Page 5 of 17

		RDT&E PROGRAM ELEMENT/PROJECT	LEMENT/PROC	JECT COST	PROJECT COST BREAKDOWN (R-3)	WN (R-3)	(			DATE: February 1998	1998
APPROPRIATION/BUDGE: RDT&E, Defense Wide/07	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	fIVITY				R-1 Natio	R-1 ITEM NOMENCLATURE National Military Command Syst. NMCS Subsystem Engineering/T50	ENCLATU tary Comm m Enginee	RE and System ring/T50	System (NMCS)-Wide Support/0302016K 3/T50	pport/0302016K
A. <u>Project</u> Projec	Project Cost Breakdown: (\$Millions) Project Cost Categories	<u>wn</u> : (\$Million ories	ons)		FY 97		FY98		FY99		
a. Sy	Systems Engineering	ering			.361		.306		* 0		
TOTAL					.361		306				
B. Budget A	ب و	istory and ment Organi	Planning In zations	formation:	: <b>u</b> z						
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to FY97	Budget FY97	Budget FY98	Budget <u>FY99</u>	Budget to Complete	Total Program	
Multiple Performing Activities	C/SS CPAF CPFF WR/PO					.361	.306		Contg	Contg	
Government Fu.	Government Furnished Property: N/A	ty: N/A									
Total Project						.361	.306				
* Beginning F	* Beginning FY99, this project is being realigned to	ect is being	realigned to	PE 0303149K,	C41	for the V	for the Warrior, project T50.	project T	50.		

RDIGE BUD	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	FICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIEE, Defense Wide/07				R-1 ITEM National 1	R-1 ITEM NOMENCLATURE National Military Comman	TURE	em (NMCS) -	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
. COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY 0.2	FY03	Cost to Complete	Total
NMCS Command Center Engineering/S32	1.202	1.013	1.189	1.247	1.312	1.331	1.385 Contg	Contg	Contg

Mission Description and Budget Item Justification:

command center systems which provide the underpinning capabilities for the crisis/war decision-making processes of the National Command Authorities (NCA), the NMCS, and the Unified and Specified Commanders-in-Chief. Technical activities The project emphasizes the utilization of commercial-off-the-shelf (COTS) and emerging technologies for application in NMCS command centers in information processing and overall facility design to provide common solutions to theater, national, and world-wide This project provides overall system engineering and technical integration activities for a broad spectrum of crisis situations affecting the Department of Defense (DOD) and the Executive Office of the President. include requirements analysis, systems definition and engineering, and rapid prototyping.

## (U) FY 1997 Accomplishments:

- Technical analysis for implementation of improvements to National Airborne Operation Center (NAOC) and Special Aircraft Mission (SAM) aircraft (3rd Otr - 4th Qtr; \$98K).
- Engineering support for qualitative operational test and evaluation of major NAOC improvements (4th Qtr;
- Trouble-shooting and support of current NAOC and 89th Wing operations (4th Qtr; \$147K).

0

0

0

- Development of overall and individual systems and subsystem engineering, transition plans and test plans for moving the NMCC to another location in the Pentagon (1st Qtr - 3rd Qtr; \$529K).
  - Engineering evaluation of new emergency message and TW/AA systems for the NMCC and NMCC Site R (1st Qtr 4th Qtr; \$171K).
- Integration engineering and transitioning secure NMCC systems to the DMS (1st Qtr 2nd Qtr; \$97K). Revise and update the Senior Leadership Communications Architecture (SLCA) (4th Qtr; \$87K). 0

Page 7 of 17

RDTGE E	BUDGET IT	EM JUSTIF	ICATION (	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fel	DATE: February 1998	8
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National N	R-1 ITEM NOMENCLATURE National Military Comman	rure mmand Syst	em (NMCS) -	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	./0302016K
COST (in millions)		FY 97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
NMCS Command Center Engineering\S32		1.202	1.013	1.189	1.247	1.312	1.331	1.385 Contg	Contg	Contg

#### (U) FY 1998 Plans:

- Revise and update the SLCA (1st Qtr 4th Qtr; \$60K).
- Engineering support for qualitative operational test and evaluation of major NAOC improvements (1st-4th Qtr; Technical analysis for implementation of improvement to NAOC and SAM aircraft (1st Qtr - 4th Qtr; \$120K).
- Trouble-shooting and support of current NAOC and 89th Wing operations (1st Qtr 4th Qtr; NMCS transition to Defense Message System (DMS) (1st Qtr- 4th Qtr; \$100K). 0

\$149K).

- NMCS Engineering Support for integration of DII elements (1st Qtr 4th Qtr; \$169K). NMCS systems Test & Evaluation (1st Qtr - 4th Qtr; \$150K). 0
  - NMCC Baseline Management (1st Qtr 4th Qtr; \$122K)
    - \$1.013M Total

0

0

#### FY 1999 Plans: (<u>n</u>)

0

- Revise and update the SLCA (1st Qtr 4th Qtr; \$60K).
- Technical analysis for implementation of improvements to NAOC and SAM aircraft (1st Otr 4th Otr; \$104K).
  - Engineering support for qualitative operational test and evaluation of major NAOC improvements (1st Qtr -4th Qtr; \$110K).
- Trouble-shooting and support of current NAOC and 89th Wing operations (1st Otr 4th Otr; \$149K).
- Automated Configuration Management for JS and NMCC (1st Qtr 4th Qtr; \$144K). 0 0

Page 8 of 17

RDTGE B	RDIGE BUDGET ITEM JUSTIFI	M JUSTIF	CATION (	ICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National	R-1 ITEM NOMENCLATURE National Military Comman	TURE	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)		FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
NMCS Command Center Engineering\S32		1.202	1.013	1.189	1.247	1.312	1.331	1.385 Contg	Contg	Contg

## (U) FY 1999 Plans (Continued):

- NMCC Site R and STRATCOM Planning (1st Otr 4th Otr; \$103K).
  - NMCS DDO Upgrade (1st Qtr 4th Qtr; \$115K). 0 0
- NMCS Engineering Support for integration of DII elements (1st Qtr 4th Qtr; \$150K).
  - NMCC Relocation Connectivity to JCS and HEMP issues (1st Qtr 4th Qtr; \$55K). 0 0
    - NMCC Engineering of COM and ADP Systems (1st Qtr 4th Qtr; \$199K) \$1.189M Total

## Program Change Summary:

	FY 97	FY98	FY99	
Previous President's Budget (FY98)	1.224	1.244	1.238	
Appropriated Value	1.224	1.244		
Adjustments to Appropriated Value	022	231		
Adjustments to Budget Year Since FY98 President's Budget			049	
Current Budget Submit/President's Budget (FY99)	1.202	1.013	1.189	
Change Summary Explanation:				

FY97 change due to below threshold reprogramming

FY98 change due to Congressional adjustments to Defense-wide investment appropriation. FY99 adjustment due to revised inflation rates.

Page 9 of 17

		RDTGE B	SUDGET IT	RDIGE BUDGET ITEM JUSTIF	CATION (	ICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	N/BUDGET 1 Wide/07	ACTIVITY					R-1 ITEM National M	R-1 ITEM NOMENCLATURE National Military Command		System (NMCS)-Wide	Wide Support	Support/0302016K
COST (i	COST (in millions)	3)		FY97	FY 98	FY99	FY 0 0	FY01	FY02	FY03	Cost to	Total
NMCS Command Ce Engineering/S32	Center 532			1.202	1.013	1.189	1.247	1.312	1.331	1.385	Contg	Contg
c. Other Pro	Other Program Funding Summary:	ling Sum	na ry:									
O&M 0302019K	)2019K			FY97	EY.	FY98	FY99	Total Contg	Total Cost Contg			
D. Schedule Profile:	Profile:							٠				
EY1997	1st Qtr: 2nd Qtr: 4th Qtr:	Provic Develo Comple SLCA u	Provide User Test & Develop Option Year Complete Engineering SLCA update to provithe Senior Leadership	Eva 2 c 2 c 2 c 1 fc	raluation cri of contract of contract for systems t cor systems t	triteria 1 tr for NMG transiti Service	nation criteria for NAOC Mod Block V. contract for NMCS Engineering Test & Evaluation. contract for Command Center System Engineering. systems transition of new NMCC. NCs and Service Chiefs guidance on how to improve their vel Communications System.	od Block ring Test er System NMCC. idance on	v. & Evaluation.   Engineering.   how to improv	tion. ing. mprove tl	heir portions of	ns of
EY1998	lst Otr: 2nd Otr: 3rd Otr: 4th Otr:	Provic Integi Update Annual	de inter rate new e on-lin	Provide interactive distributed communications Integrate new DII elements into JS procedures. Update on-line database reference systems with Annual update of SLCA.	tributed nts into referenc	communications JS procedures. Se systems with		management s new subscrib	system for NMCS ber services.		tasks.	
										·		
					Pa	Page 10 of 17	17					

	æ	DTEE BU	DGET IT	RDIGE BUDGET ITEM JUSTIFICATION	ICATION (	(R-2 Exhibit)	it)			DATE: Fel	DATE: February 1998	
APPROPRIATION/BUDGE: RDT&E, Defense Wide/07	E.	ACTIVITY					R-1 ITEM National M	ITEM NOMENCLATURE onal Military Comman	<b>TURE</b> mmand Syst	em (NMCS) -	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016к
COST	COST (in millions)			FY97	FY98	FY99	FY00	FY01	FY 02	FY03	Cost to Complete	Total Cost
NMCS Command Center Engineering/832	ind Center 1g/S32			1.202	1.013	1.189	1.247	1.312	1.331	1.385	Contg	Contg
FY1999	1st Otr: 2nd Otr: 3rd Otr: 4th Otr:	NMCC AN NMCC AN NMCC AN NMCC AN NMCC AN NMCC D. Annual	elocatic isplay a II integ Update	NMCC relocation issues, consol NMCS ADP terminal improvement. NMCC display and video switchi NMCC DII integration with HEMF Annual Update of SLCA.	consolidation of commovement.  th HEMP Room Equipment.  Page 11 of 17	ng improvemen Room Equipme	NMCC relocation issues, consolidation of communications NMCS ADP terminal improvement. NMCC display and video switching improvement. NMCC DII integration with HEMP Room Equipment Suite. Annual Update of SLCA. Page 11 of 17	s	control from	from Site R.		

	RDTG	RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	LEMENT/PRO	JECT COST BI	T BREAKDO	WN (R-3			ימ ח	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	N/BUDGET ACT Wide/07	IVITY				R-1 Natio	ITEM NOMENCLATURE onal Military Comman Command Center Engi	ENCLATU tary Comm Tenter En	RE and System gineering/	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K NMCS Command Center Engineering/S32	02016K
A. Project C	Project Cost Breakdown: (\$Millions)	MD: (\$Millio	ons)								
Project	Projected Cost Categories	egories	-								
a. Sys	System Engineering	ring			1.	EY97 1.202	EY98 1.013	ᄪ	1.189		
B. Budget Ac Support	Budget Acquisition History and Planning I Support and Management Organizations	istory and nent Organi;		nformation:	: <del>uo</del>						
Contractor or Government Performing	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAG	Prior to FY97	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program	
Multiple Performing Activities						1.202	1.013	1.189	Contg	Contg	
Government Furnished Property: N/A	nished Propert	.y: N/A									
TOTAL PROJECT						1.202	1.013	1.189			
					Page 12 of 17	ı£ 17					

RDIGE BUDGE!	RDT&E BUDGET ITEM JUSTIF	rication (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIEE, Defense Wide/07				R-1 ITEM National P	R-1 ITEM NOMENCLATURE National Military Comman	TURE	em (NMCS) -	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY97	FY98	FY99	FYOO	FY 0.1	FYOZ	EX03	Cost to Complete	Total Cost
Support to Defense Support Activity/260	.387	.369	0	0	0	0	0	0	.756

# A. Mission Description and Budget Item Justification:

Research is also provided in a number of areas of special interest to the This project is unique in terms of the policy decisions supported and that the customers supported are actual DOD policy This project provides direct support to the Defense Support Activity (DSA) as prescribed in DOD Directive 5100.81. OSD's theater tactical ballistic and cruise missile defense community and Precision Guided Munition (PGM) communities, supports systems engineering, development of state-of-the-art technologies and the translation of these technologies as well as the defense planning community, and the acquisition and employment policy making communities. It also Z60 supports basic research and the acquisition and enhancement of software that aids in the into leading edge analytical models. Acquisition of support is provided by competitively awarded contracts. illumination of counter-proliferation issues. decision-makers.

## (U) FY 1997 Accomplishments:

- Developed analytical tools used to support assessments of joint war fighting operational plans' compliance with the Secretary's guidance and to identify, clarify, and resolve policy issues. This development focused on (\$100K) (2nd Qtr - 4th Qtr) illustrating PGM effects and optimal deployment of theater missile defenses.
  - Acquired and enhanced leading edge analytical tools to identify and clarify policy issues in the following 0
- 1) the probability of structural damage to deep underground targets; and
- (\$100K) (2nd Qtr 4th Qtr) Examined the effectiveness of current and planned theater, regional, and national missile defensive systems The resulting analysis was used to support the Quadrennial Defense Review (QDR) 2) the effects of chemical and biological munitions on military operations. against emerging threats.

O

Developed analytical tools for the study of both the cruise missile defense and ballistic missile defensive process and to realign the Theater High Altitude Air Defense (THAAD) program (\$100K) (2nd Qtr - 4th Qtr) systems, technologies, logistics, and architectures. (\$50K) (2nd Qtr - 4th Qtr) 0

Page 13 of 17

RDIGE B	SUDGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIGE, Defense Wide/07					R-1 ITEM National	R-1 ITEM NOMENCLATURE National Military Comman	TURE	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)		FY97	FY98	FY 9 9	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
Support to Defense Support Activity/260		.387	.369	0	0	0	0	0	0	.756

## (U) FY 1997 Accomplishments (cont'd):

The analysis was used to support the development of the DoD cruise missile defense acquisition master plan Provided research support to the USD(A&T) as the cruise missile and ballistic missile threats evolved. (2nd Qtr - 4th Qtr) \$.387M Total

#### (U) FY 1998 Plans:

- compliance with the Secretary's guidance and to rapidly illuminate policy issues. This development will focus on illustrating PGM effects and optimal deployment of theater missile defenses. (\$80K) (2nd Qtr 4th Qtr) Continue to develop analytical tools used to support assessments of joint war fighting operational plans'
  - Continue to acquire and enhance leading edge analytical tools to rapidly illuminate policy issues in the following areas:
- 1) the probability of structural damage to deep underground targets; and
- Examine the ongoing Israeli/US ground based Theater High Energy Laser and the U.S. Airborne Laser programs for (\$81K) (2nd Qtr - 4th Qtr) system efficacy and program performance. Provide alternatives and recommendations to USD(A&T). 2) the effects of chemical and biological munitions on military operations. (2nd Qtr - 4th Qtr)
- Provide programmatic alternatives and Evaluate National Missile Defense (NMD), Theater High Altitude Air Defense (THAAD), Navy Wide Area and Navy Theater Area Defense systems for performance and program effectiveness. (\$50K) (2nd Qtr - 4th Qtr) recommendations to USD(A&T).
  - Evaluate the DOD Cruise Missile Defense (CMD) programs and management structure for effectiveness and provide (\$50K) (2nd Qtr - 4th Qtr) alternatives and recommendations to USD(A&T). 0

Page 14 of 17

RDTEE BUDG	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIEE, Defense Wide/07				R-1 ITEM National 1	R-1 ITEM NOMENCLATURE National Military Comman	<b>TURE</b> ommand Syst	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FYOZ	FY03	Cost to Complete	Total Cost
Support to Defense Support Activity/260	.387	.369	0	0	0	0	0	0	.756
(U) FY 1999 Plans:									

o Function disestablished by direction of the Defense Reform Initiative.

## Program Change Summary:

	EX97	FY98	FY99
Previous President's Budget (FY98)	.387	.414	.430
Appropriated Value	. 400	.414	
Adjustments to Appropriated Value	013	045	
Adjustments to Budget Year Since FY98 President's Budget			430
Current Budget Submit/President's Budget (FY99)	.387	.369	0

## Change Summary Explanation:

FY98 changes are due to Congressional Adjustment to Defense-wide Investment Appropriation. FY99 changes are due to Defense Reform Initiative.

#### Other Program Funding Summary: ບ່

Not applicable.

Page 15 of 17 UNCLASSIFIED

UE ELTCR	RDIGE BUDGET ITEM JUSTIFICATION	M JUSTIFI		(R-2 Exhibit)	it)			DATE: February	bruary 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National M	R-1 ITEM NOMENCLATURE National Military Command	FURE	em (NMCS) -	System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)		FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Support to Defense Support Activity/260		.387	.369	0	0	0	0	0	0	.756
D. Schedule Profile:										
Fiscal Year actual and planned events by quarter	events b	y quarte	u							
	FY97	7	FY98	98 3 4 1	FY99	4				
Annual Renewal of contract	×		×			4				
					•					
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						-			and the second s		
	RDTE	RDIGE PROGRAM ELEMENT/PROJECT	LEMENT/PROJ	ECT COS	COST BREAKDOWN	WN (R-3)			DA	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	/BUDGET ACT: Wide/07	IVITY				R-1 ITE National Support	rrem NOM nal Milit rt to Des	ITEM NOMENCLATURE onal Military Comman ort to Defense Suppo	M NOMENCLATURE Military Command System (NMCS) to Defense Support Activity/260	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K Support to Defense Support Activity/260	02016K
A. Project C	Project Cost Breakdown:	m: (\$ Millions)	lons)								
Project	Project Cost Categories	ries				FY97		FY98	FX99		
a. Bas	Basic Research and Software Analysis	and Softwar	re Analysis			.387		.369	0		
TOTAL						.387		.369	0		
B. Budget Ac	Budget Acquisition History and Planning Information: Support and Management Organizations	story and B	Planning In zations	formatic	: <b>t</b> t						
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to	Budget FX97	Budget FY98	Budget FY99	Budget to Complete	Total Program	
Multiple Performing Activities						.387	.369	0	0	.756	
Government Furnished Property: N/A	nished Propert	y: N/A									
TOTAL PROJECT						.387	.369	0	0	.756	
					Page 17 of 17	£ 17					

RDIGE BUDG	RDT&E BUDGET ITEM JUSTIF		ICATION (R-2 Exhibit)	it)			DATE: Feb.	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Defense Integrat	R-1 ITEM NOMENCLATURE Defense Information Inf Integration/PE 0302019K	rure on Infras 12019K	tructure 1	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration/PE 0302019K	હ
COST (in millions)	FY97	FY98	FY99	FYOO	FYOI	FY 02	FY03	Cost to Complete	Total Cost
Total PE Cost: PE 0302019K	4.531	4.119	4.975	5.403	5.618	5.615	5.718	Contg	Contg
Defense-Wide C3 Architecture & Planning/T62	1.384	1.388	.814	.891	.973	886*	1.006	Contg	Contg
Technology Advancement/A19	.355	.355	0*	0	0	0	0	Contg	Contg
Modeling & Simulation/E62	0	0	4.161**	4.512	4.645	4.627	4.712	Contg	Contg
Special Projects/T64	1.159	1.039	***0	0	0	0	0	Contg	Contg
CINC/JTF C4 Integration/T66	1.633	1.337	0****	. 0	0	0	0	0	2.970

A. Mission Description and Budget Item Justification: This program element funds efforts involving the following areas: engineering support of the DII including resolution of critical interoperability and technical integration issues, and the assessment of C4I initiatives that reside on the DII COE to ensure compatibility, interoperability and technical This program element is under Budget Activity 07 because it involves efforts supporting operational the development and fielding of the Defense Information Infrastructure (DII) Common Operating Environment (COE), systems development.

- \* Effective FY 1999, this project has been incorporated into Project E62, Modeling and Simulation.
- It combines efforts previously performed under Project E61, MILSATCOM, in PE 0303126K and Project A19, Technology Advancement, in PE 0302019K. \*\* This project is not a new start.
- \*\*\* Effective FY 1999, this project has been realigned to PE 0303131K, Minimum Essential Emergency Communications Network (MEECN), Project T64.
- \*\*\*\* Beginning FY 1999, this project is being converted from RDT&E to O&M.

Page 1 of 22

RDTGE B	SUDGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Feb	<b>DATE:</b> February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					<b>R-1 ITEM</b> Defense II 0302019K	R-1 ITEM NOMENCLATURE Defense Information Infr 0302019K	<b>rure</b> Infrastuct	ure Engine	R-1 ITEM NOMENCLATURE Defense Information Infrastucture Engineering and Integration 0302019K	tegration
COST (in millions)		FY97	FY98	FY99*	EY00	FY01	FY 02	FY03	Cost to Complete	Total Cost
Defense-Wide C3 Architecture & Planning/T62		1.384	1.388	.814	.891	. 973	. 988	1.006 Contg	Contg	Contg

. Mission Description & Budget Item Justification:

accomplished through the development of enterprise, mission, functional and technical architecture products. These products depict how all DOD systems, to include information, sensors, data storage services, and communications networks networks, and computer storage devices to provide collection, processing, storage, display and information transfer; (b) simulation of the DII; (c) The Defense Information Systems Network (DISN) which addresses the fixed common-user systems, treating the long haul communications, base-level, and rear-area tactical communications as an end-to-end system with particular focus on user requirements, technology and standards, features and services, security, and network manage-Information Infrastructure (NII). This project gives DOD overall improved operational performance and reduced costs DII Technology Insertion, which provides assessment of the utility of new technology through high level performance Infrastructure (DII), which integrates all DOD information systems, sensors, data storage services, communications This project encompasses two efforts: (1) The first effort provides the interoperability and integration of provide collection, processing, storage, display and information transfer. It incorporates the DII and National second effort provides planning for interoperability and integration of C4I for the Warrior (C4IFTW). This is accomplished through a multi-level planning program which includes four elements: (a) The Defense Information ment; (d) the DISN Security which includes current and future DISN security initiatives for communications. resources essential to the achievement of a Global C4I Infrastructure that will be "seamless" to the user. through common architecture standards and interfaces, and a sharing of assets and capabilities.

\* Beginning FY99, part of this project was transferred to PE 0303126K, Long Haul Communications, project T82 to more appropriately reflect the work under Defense Information Systems Network.

Page 2 of 22

RDTEE B	UDGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	oit)			DATE: Fel	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Defense I 0302019K	R-1 ITEM NOMENCLATURE Defense Information Infr 0302019K	<b>rure</b> Infrastuct	ture Engine	R-1 ITEM NOMENCLATURE Defense Information Infrastucture Engineering and Integration 0302019K	tegration
COST (in millions)		FY 9.7	FY98	FY99*	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Defense-Wide C3 Architecture & Planning/T62		1.384	1.388	.814	.891	.973	.988	1.006 Contg	Contg	Contg

## (U) FY 1997 Accomplishments:

- between the components of DISN, Defense Messaging System (DMS), DII Common Operating Environment (COE), Global Command and Control System (GCCS), Global Combat Support System (GCSS), DII Command and Control (DIIC2) and Perform Horizontal Integration Analysis and develop system engineering guidance for Horizontal Integration INFOSEC (1st Qtr - 4th Qtr; \$838K).
- Develop prototype access line sizing for ATM-based networks and prototype backbone link sizing for ATM-based networks (1st Qtr - 4th Qtr; \$546K). \$1.384M Total 0

#### (U) FY 1998 Plans:

- Continue to perform Horizontal Integration Analysis and develop system engineering guidance for Horizontal Integration between the components of DISN, DMS, DII COE, GCCS, GCSS, DIIC2 and INFOSEC (1st Qtr 4th Qtr; 0
- Develop DARPA/DISA Joint Program Office recommended ATM user premises infrastructure design/analysis trade-off capability and develop ATM traffic source characterizations for specific applications (1st Qtr - 4th Qtr; 0
- \$1.388M Total

\* Beginning FY99, part of this project was transferred to PE 0303126K, Long Haul Communications, project T82 to more appropriately reflect the work under Defense Information Systems Network.

Page 3 of 22

RDTEE BI	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	IFICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Defense II 0302019K	R-1 ITEM NOMENCLATURE Defense Information Infr 0302019K	TURE Infrastuct	ure Engine	R-1 ITEM NOMENCLATURE Defense Information Infrastucture Engineering and Integration 0302019K	tegration
COST (in millions)	FY97	FY98	FY99*	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Defense-Wide C3 Architecture & Planning/T62	1.384	4 1.388	.814	.891	. 973	986.	1.006 Contg	Contg	Contg

#### (U) FY 1999 Plans:

Continue to perform Horizontal Integration Analysis and develop system engineering guidance for Horizontal Integration between the components of DISN, DMS, DII COE, GCCS, GCSS, DIIC2 and INFOSEC (1st Qtr - 4th Qtr; \$814K).

\$.814M Total

### Program Change Summary:

	FY97	FY9R	FVGG
Previous President's Budget (FY98)	1.373	1.464	1.542
Appropriated Value	1.399	1.464	
Adjustments to Appropriated Value	015	076	
Adjustments to Budget Year Since FY98 President's Budget			728
Current Budget Submit/President's Budget (FY99)	1.384	1.388	814
Change Summary Explanation:			

FY97 decrease due to below threshold reprogramming.

FY98 decrease due to Congressional adjustments to Defense-wide investment appropriation.

adjustment due to realignment of DISN portion of this project which was transferred to PE 0303126K, Long Communications, project T82 and revised inflation rates. FY99 Haul

\* Beginning FY99, part of this project was transferred to PE 0303126K, Long Haul Communications, project T82 to more appropriately reflect the work under Defense Information Systems Network.

Page 4 of 22

RDTEE BU	RDTÆE BUDGET ITEM JUSTIFI		CATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIKE, Defense Wide/07				R-1 ITEM Defense I 0302019K	R-1 ITEM NOMENCLATURE Defense Information Infr 0302019K	<b>FURE</b> Infrastuct	ure Engine	R-1 ITEM NOMENCLATURE Defense Information Infrastucture Engineering and Integration 0302019K	tegration
COST (in millions)	FY 97	FY 98	FY99*	FYOO	FY01	FY02	FY03	Cost to	Total Cost
Defense-Wide C3 Architecture & Planning/T62	, 1,384	1.388	.814	.891	.973	986.	1.006	1.006 Contg	Contg

C. Other Program Funding Summary: N/A

Acquisition Strategy: The MITRE Corporation, McLean, VA; Booz-Allen & Hamilton, Inc., Bethesda, MD; Logicon, Reston, VA.

#### D. Schedule Profile:

FY 1997 3rd Otr: Develop design tools for ATM-based networks. FY 1998 4th Otr: Develop ATM traffic source characterizations.

Develop capability to import operational topology and traffic from ATM-based networks. 4th Qtr: FY 1999

\* Beginning FY99, part of this project was transferred to PE 0303126K, Long Haul Communications, project T82 to more appropriately reflect the work under Defense Information Systems Network.

Page 5 of 22

	RDTGE	E PROGRAM ELEME	NT/	JECT COS	PROJECT COST BREAKDOWN (R-3)	DWN (R-3)				DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	N/BUDGET ACT Wide/07	IVITY				R-1 Defen Integ	R-1 ITEM NOMENCLATURE Defense Information Infr Integration 0302019K/Def Planning/T62	ENCLATUR ation Inf 02019K/De	E rastructu efense-Wid	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering and Integration 0302019K/Defense-Wide C3 Architecture & Planning/T62	
A. Project C	t Cost Breakdown: (Systems Engineering	Wn: (\$Millions) ering	ons)		EY 1.	<u>FY97</u> 1.384	FY98 1.388	É	FY99		
TOTAL					1.	1.384	1.388		.814		
B. <u>Budget Acc</u> Support		nisition History and Plannin and Management Organizations	H	nformation:	: uc						
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Prior to	Budget FY97	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget to	Total Program	
Multiple Performing Activities	CPAF CPFF MIPR					1.384	1.388	.814	Contg	Contg	
Government Furnished Property: N/A	nished Propert	ty: N/A									
TOTAL PROJECT						1.384	1,388	.814			
	:										
					Page 6 of 22	of 22					

RDTGE BI	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Defense In	R-1 ITEM NOMENCLATURE Defense Information Infr 0302019K	<b>TURE</b> Infrastruc	ture Engin	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration 0302019K	egration
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
Technology Advancement/A19	.355	.355	0*	0	0	0	0	0 Contg	Contg

. Mission Description & Budget Item Justification:

military operations, requiring greater flexibility to meet the global warfighting requirements to rapidly project forces anywhere in the world. This project supports the Command, Control, Communications, Computers & Intelligence The rapid evolution of the global military environment is driving a major evolution of the DOD force structure and Level Architecture (HLA) tool that can quantitatively assess C4ISR systems effects on military campaigns. Furthermore, the C4ISR Model is an integral part of the Sensor to Shooter Battle Management studies, as it is the only DOD model and Reconnaissance Surveillance Model (C4ISR) model which is the most advanced analytical tool in DOD and is the only High simulation tool capable of fully interweaving C4ISR systems. The quantitative analysis provided accentuates the decision making process in new acquisitions, assessments of doctrine and design of operational activities.

## (U) FY 1997 Accomplishments:

o Initial integration with theater level force deployment models and analytical support for Vision 2000 (1st Qtr - 3rd Qtr) (\$.355M Total) objectives.

#### (U) FY 1998 Plans:

Full integration with theater level force deployment models. (1st Qtr - 3rd Qtr) (\$.355M Total)

#### (U) FY 1999 Plans:

- Funds realigned from Technology Advancement/A19 to Modeling and Simulation/E62 in this same program element.
- Effective FY 1999, this project has been incorporated into Project E62, Modeling and Simulation in PE 0302019K.

Page 7 of 22

RDIGE BUDG	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	CATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Defense I 0302019K	R-1 ITEM NOMENCLATURE Defense Information Infr 0302019K	<b>TURE</b> Infrastruc	ture Engin	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration 0302019K	egration
COST (in millions)	FY97	FY98	FY99	FY00	FY01	FY 0.2	FY03	Cost to Complete	Total Cost
Technology Advancement/A19	.355	.355	*0	0	0	0	0	0 Contg	Contg
B. Program Change Summary: Previous President's Budget (FY 1998)	: (FY 1998)					EY97	FY98	FY99 .360	8I O

	.366 .360		011		*355 *
FY97	.361	.361	006		.355
	Previous President's Budget (FY 1998)	Appropriated Value	Adjustments to Appropriated Value	Adjustments to Budget Year Since FY 1998 President's Budget	Current Budget Submit/President's Budget (FY 1999)

Change Summary Explanation:

FY97 change due to below threshold reprogramming.

FY99 change due to realignment of funds from Technology Advancement/A19 to Modeling and Simulation/E62. FY98 change due to Congressional adjustment to Defense-wide Investment Appropriation.

## Other Program Funding Summary:

\* Effective FY 1999, this project has been incorporated into Project E62, Modeling and Simulation in PE 0302019K.

Page 8

RDIGE BUD	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	_
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Defense Do 0302019K	R-1 ITEM NOMENCLATURE Defense Information Infr 0302019K	<b>TURE</b> Infrastruc	ture Engin	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration 0302019K	egration
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
Technology Advancement/A19	.355	.355	0*	0	0	0	0	0 Contg	Contg

D. Schedule Profile:

Fiscal Year actual and planned events by quarter.

FY 1997 1st Qtr: Execute option year of technical support contract

FY 1998 1st Qtr: Execute option year of technical support contract

Page 9 of 22

\* Effective FY 1999, this project has been incorporated into Project E62, Modeling and Simulation in PE 0302019K.

RDTGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	(R-3)		DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	R-1 ITEM NOMENCLATURE Defense Information Infrastructure 0302019K/Technology Advancement/A19	ATURE n Infrastru y Advanceme	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration 0302019K/Technology Advancement/A19
A. Project Cost Breakdown: (\$ Millions)			
Project Cost Categories	FY97	FY98	FY99
a. System analysis, design and programming	.355	.355	*
TOTAL	355	.355	
B. Budget Acquisition History and Planning Information			
N/A			
* Effective FY 1999, this project has been incorporated into Project E62, Modeling	ect E62, Modelin	and	Simulation in PE 0302019K.
Page 10 of 3	22		

RDTEE BUD	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	rication (	R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Defense Ir 0302019K	R-1 ITEM NOMENCLATURE Defense Information Infra 0302019K	<b>TURE</b> Infrastruc	ture Engin	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration 0302019K	egration
COST (in millions)	FY97	FY 98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Modeling and Simulation/E62	0	0	4.161	4.512	4.645	0 4.161 4.512 4.645 4.627 4.712 contg	4.712	Contg	Contg

# Mission Description & Budget Item Justification:

with services and a suite of tools capable of identifying key decision points required to carry out their mission in the simulation efforts to give DISA the capability to determine the impact of IW attacks on the DII; 3) provide modeling and The rapid evolution of the global military environment is driving a major evolution of the DOD force structure and military operations, requiring greater flexibility to meet the global warfighting requirements to rapidly project forces cost through a deliberate decision management process. These services and tools will: 1) provide modeling and analysis anywhere in the world. This effort supports the DOD communications planning and investment strategy for the successful deployment of DOD information systems by performing a broad spectrum of activities in support of C41 programs. DISA has explore available COTS tools for developing models to assess information system architecture; 7) stimulate GCCS through investigate methods linking these models with other GOTS used in information network modeling, design and analysis; 6) most effective way. This work is essential to achieve the DISA goal of quality information services at an affordable the lead in DOD for providing modeling and simulation to DOD decision makers -- from the OSD level to the war fighter -integrated environment in support of the modeling and simulation efforts of DISN, DMS, IW, the DII, GCSS and GCCS; 5) support to the key DISA programs and initiatives of DMS, DISN and Electronic Commerce 2) support initial INFOSEC/IW simulation assessment of the DII's ability to support CINCs, JCS, Services, and other Federal agencies' current and emerging C4ISR mission driven information requirements; 4) enhance the functionality of GOTS tools to engender an induction of combat models and simulation into GCCS.

## (U) FY 1997 Accomplishments:

o Efforts previously funded under Project E61, MILSATCOM in PE 0303126K and Project A19, Technology Advancement in PE 0302019K.

#### J) FY 1998 Plans:

o Efforts are funded under Project E61, MILSATCOM in PE 0303126K and Project A19, Technology Advancement in PE 0302019K

#### (U) FY 1999 Plans:

o DISA Program Manager Support provides modeling and analysis support to the key DISA programs and initiatives of DMS, GCCS, GCSS, DISN and Electronic Commerce. (\$1,298K)(1st Qtr - 4th Qtr)

#### Page 11 of 22

	RDT&E BUDGET		USTIFI	ITEM JUSTIFICATION (R-2	R-2 Exhibit)	it)			DATE: February	DATE: February 1998	8
AP RDT	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Defense Ir 0302019K	ITEM NOMENCLATURE nse Information Infr 319K	<b>rure</b> Infrastruc	ture Engin	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration 0302019K	egration
	COST (in millions)	FY	FY 97	FY 98	FY99	FYOO	FY01	FY 02	EY03	Cost to Complete	Total Cost
Mo	Modeling and Simulation/E62		0	0	4.161	4.512	4.645	4.627	4.712	Contg	Contg
	o Warfighter and CINC Support provides mod systems to support CINCs, JCS, Services, information requirements (\$1,635K) (1st	pport provics, Sits (\$1,635)	rides n ervice K) (1s	leling and cotr -	f and simulation other Federal 4th Qtr)	ation ass ral agenc	simulation assessment to Federal agencies' curren Otr)	co evaluate ent and eme	te commun.	on assessment to evaluate communications and related agencies' current and emerging C4ISR mission driven	and related ston driven
	o Modeling and Simulation Tools provides DOD decision makersfrom the OSD level to the warfighterwith a of tools capable of identifying key decision points required to carry out their mission in the most effect way. (\$1,228K) (1st Qtr - 4th Qtr) \$4.161M Total	lation Tools provid of identifying key (1st Qtr - 4th Qtr)	covides key de Qtr)	s DOD dec	ision mak oints req	ersfrom prired to	n the OSD carry out	level to their mi	the warf: Ission in	ighterwith a suit the most effective	h a suite ffective
œ.	. Program Change Summary:						000	Ē	0	000	
	Previous President's Budget (FY 1998) Appropriated Value	t (FY 1998	£				*	4 *	*	*	
	Adjustments to Appropriated Value. Adjustments to Budget Year Since FY 1998 Current Budget Submit/President's Budget	d Value : Since FY :ident's Bu		President (FY 1999)	President's Budget (FY 1999)	0	* .	*		4.161	
	Change Summary Explanation: * FY99 Funds realigned from PE	n: om PE 0302019K		schnology	Technology Advancement/Al9	ent/A19 a	and PE 030	3126K MI	0303126K MILSATCOM/E61	61.	
ບໍ	Other Program Funding Summary:	:		·			5	Ğ	o o	Ç	
	Муо						0	0	0	4.860	
		·	•	Pac	Page 12 of	22					

63

RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ITEM JUSTIF	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	8
APPROPRIATION/BUDGET ACTIVITY RDIEE, Defense Wide/07				R-1 ITEM Defense Ir 0302019K	ITEM NOMENCLATURE nse Information Infr 019K	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering 0302019K	ture Engir	neering & Int	& Integration
COST (in millions)	FY97	FY98	FY 99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
Modeling and Simulation/E62	0	0	4.161	4.512	4.645	4.627	4.712	Contg	Contg
D. Schedule Profile: Fiscal Year actual and planned events by	d events by	quarter.							
				EY97 1 2 3 4	1 2 3	1 1	FY99 2 3 4		
Execute option year of							>		
SAIC support contract				٠			×		
							·		
		Pac	Page 13 of 22	22					

RDTEE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	(R-3)		DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE Defense Information Infr 0302019K	Infrastruc	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration 0302019K
A. Project Cost Breakdown (\$Millions)			
	FY97	FY98	FY99
Project Cost Categories			
Modeling & Simulation	0	0	4.161
Total	0	0	4.161
B. Budget Acquisition History and Planning Information: N/A			
Page 14 of 2	22.		

RDTGE B	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	FICATION (	R-2 Exhib	oit)		Д	ATE: Fel	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM Defense II 0302019K	R-1 ITEM NOMENCLATURE Defense Information Infr 0302019K	R-1 ITEM NOMENCLATURE Defense Information Infrastucture Engineering and Integration 0302019K	re Engine	ering and In	tegration
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY 0.2	FY03	Cost to Complete	Total
Special Projects/T64	1.159	1.039	*0	0	0	0	0	0 Contg	Contg

1. Mission Description & Budget Item Justification:

Therefore, information on this project is All aspects of this project are classified and require special access. not contained in this document but can be obtained upon request.

## . Program Change Summary:

	EY97	FY98	FY99
Previous President's Budget (FY98)	1.114	1.200	1.246
Appropriated Value	1.155	1.200	
Adjustments to Appropriated Value	+.004	161	
Adjustments to Budget Year Since FY98 President's Budget			
Current Budget Submit/President's Budget (FY99)	1.159	1.039	**
Change Summary Explanation:			,

FY97 increase due to below threshold reprogramming.

FY98 decrease due to Congressional adjustments to Defense-wide investment appropriation.

## . Other Program Funding Summary:

PE 0303131K, Minimum Essential Emergency Communications Network (MEECN). Related RDT&E:

### D. Schedule Profile:

Information will be made available upon request.

\* Beginning FY99, this project is realigned to PE 0303131K, Minimum Essential Emergency Communications Network, (MEECN), project T64.

Page 15 of 22

	RDT6	E PROGRAM 1	RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	TECT COS	T BREAKDO	DWN (R-3			DA	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	JUDGET ACT	ΙΝΙΤΥ				R-1 Defer Integ	ITEM NON USE Information 0	R-1 ITEM NOMENCLATURE Defense Information Infr Integration 0302019K/Spe	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engine Integration 0302019K/Special Projects/T64	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering and Integration 0302019K/Special Projects/T64	
A. Project Cost Breakdown: (\$Millions)	oject Cost Breakdown: (	Wn: (\$Milli	ons)			FY97	7	FY 98	FY99		
, 4	Systems	Systems Engineering				1.159	69	1.039			
TOTAL						1.159	69	1.039	*0		
B. Budget Acqu	isition H nd Manage	dget Acquisition History and Plannin Support and Management Organizations	Budget Acquisition History and Planning Information Support and Management Organizations	formati	ďo						
Contractor or Co Government Me Performing or Activity Vs	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity <u>EAC</u>	Project Office EAC	Prior to FY97	Budget FY97	Budget <u>FY98</u>	Budget FY99	Budget to Complete	Total Program	
MITRE SS	SS/CPFF			ė		1.159	1.039		Contg	Contg	
Government Furnished Property: N/A	hed Proper	ty: N/A									
TOTAL PROJECT				•		1.159	1.039				

\*Beginning FY99, this project is being realigned to PE 0303131K, Minimum Essential Emergency Communications Network, project T64.

Page 16 of 22

RDTEE BU	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	3
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM Defense II Integratio	R-1 ITEM NOMENCLATURE Defense Information Infr Integration/0302019K	<b>rure</b> Infrastruc (	cture Engin	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering and Integration/0302019K	
COST (in millions)	FY 97	FY 98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
CINC/JTF C4 Integration/T66	. 1.633	1.337	*0	0	0	0	0	0	0 2.970

Mission Description & Budget Item Justification:

advocates documentation of short, middle, and long range C4 objectives, anticipating future requirements and serving as regional C4 road map. CJCSI 6111.01 specifically identifies DISA as the responsible agent for providing the following The Chairman, Joint Chiefs of Staff Instruction (CJCSI) 6111.01, C4 Planning, Assessment, and Evaluation Process, architectures, modifying existing systems, and assessing short and long range C4 capabilities or deficiencies. It is the basis for CINC C4 inputs to the Joint Strategic Planning System (JSPS), PPBS, the CINCs Integrated Priority List establishes policy guidelines and assigns responsibilities for modernization planning, analytical assessment, and (IPL), the Joint Monthly Readiness Report, and the Joint Warfighter Capabilities Assessment (JWCA). The process operational evaluation of C4 systems. It provides general guidance to the CINCs, sub-unified commands, Service components, and the Joint Staff for coordinating actions required to field new C4 systems, integrating systems regional C4 road map. CJCSI 6111.01 specifically identifies DISA as the technical and automation support to the Joint Staff, J-6, and the CINCs:

- Development and maintenance of automated C4 analysis tools. (1)(2)
- Performing C4 studies or analysis in support of the CINCs or Joint Staff.
- Providing a secure electronic repository for C4 planning, assessment, and evaluation documents. (3)

#### (U) FY 1997 Plans:

- Transition Road Map (TRM) Support to USSOUTHCOM: This work consists of updating and integrating the USSOUTHCOM TRM with C4ISR (Intelligence) issues; in addition to developing the CINC Annual C4 Assessment. This task also involves converting the TRM along with other supporting C4 assessment documentation to Hyper Text Markup Language (HTML) and loading it on to their home page on the SIPRNET. (1st Otr - 4th Otr; \$250K)
- Beginning FY99, this project is being converted from RDT&E to O&M.

of 22

RDTGE BU	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	FICATION (	R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Defense I Integrati	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering and Integration/0302019K	TURE Infrastruc	ture Engin	eering and	
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
CINC/JTF C4 Integration/T66	1.633	1.337	*0	0	0	0	0	0	0 2.970

## (U) FY 1997 Plans (cont'd):

- This work consists of developing the FY97 USACOM C4 Planning, converted to HTML and loaded on to a home page on the SIPRNET with supporting C4 related documentation. (1st Assessment, and Evaluation Master Plan, along with the CINC Annual C4 Assessment. Both documents will be C4I Assessment and Planning Support to USACOM: Qtr - 4th Qtr; \$375K)
- Assessment, converting it to HTML, and loading it on to a home page on the SIPRNET with supporting C4 related C4I Assessment and Planning Support to USSOCOM: This work consists of developing the CINC Annual C4 (1st Qtr - 4th Qtr; \$375K) documentation. 0
- Staff home pages over the INTERNET World Wide Web. This task is inherent to supporting all CINCs and the Joint C4 PA&E Automation Support: The objective of this task is to design, implement, and maintain CINC and Joint staff. (1st Qtr - 4th Qtr; \$283K) 0
- C4 Assessment Tool: This task involves development of an automated C4 assessment tool consisting of a database capabilities for CINC USSOUTHCOM, USACOM, and USSOCOM. This criteria will be extracted from documents such as would provide a uniform methodology across all the CINCs and tie the C4 PA&E process into the overall theater populated with criteria that serve as a strategic foundation for the development of warfighter objectives and The CINCs will have the ability to weigh the relative value of each individual criteria, based on their mission and functions, producing a rank order listing of their C4 capabilities or deficiencies which they can incorporate into their JWCA submission to the Joint Staff. It the Joint Monthly Readiness Report (JMRR), IPL, Joint Mission Essential Task List (JMETL), Joint Universal architecture through an automated means. The tool would run over the SIPRNET. (1st Qtr - 4th Qtr; \$350K) Lessons Learned System (JULLS), and JWCA issues. 0

\* Beginning FY99, this project is being converted from RDT&E to O&M.

Page 18 of 22

RDTGE	BUDGET IT	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	<b>ж</b>				R-1 ITEM Defense II Integrati	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering and Integration/0302019K	<b>TURE</b> Infrastruc	cture Engin	eering and	
COST (in millions)		FY97	FY98	FY99	FYOO	FY01	FY 02	FYO3	Cost to Complete	Total
CINC/JTF C4 Integration/T66		1.633	1.337	*0	0	0	0	0	0	0 2.970

#### (U) FY 1998 Plans:

C4I Assessment and Planning Support to Joint Staff and Unified CINCs: This work consists of developing the FY98 Annual C4 Assessment. These deliverables will be converted to Hyper Text Markup Language (HTML) and loaded on to CINC home pages on the SIPRNET with supporting C4 related documentation. Support to the Joint Staff will be C4 Planning, Assessment, and Evaluation Master Plan for all CINCs in addition to development of their CINC similar. (1st Qtr - 4th Qtr; \$1,337K) \$1.337M Total

Acquisition Strategy: Logicon, Reston, VA

# . Program Change Summary:

Program Change Summary:				
	FY97	FY98	FY99	
Previous President's Budget (FY98)	1.620	1.691	1.823	
Appropriated Value	1.679	1.691		
Adjustments to Appropriated Value	046	354		
Adjustments to Budget Year Since FY98 President's Budget				
Current Budget Submit/President's Budget (FY99)	1.633	1.337	*0	
Change Summary Explanation:				

FY97 decrease due to below threshold reprogramming.

FY98 decrease due to Congressional adjustments to Defense-wide investment appropriation.

\* Beginning FY99, this project is being converted from RDT&E to O&M.

age 19 of 22

	RDIGE BUDGE	RDIÆE BUDGET ITEM JUSTIFICATION	1	(R-2 Exhibit)	it)			DATE: Fel	February 1998	3
APPROPRIATION/BUDGET RDT&E, Defense Wide/07	BET ACTIVITY				R-1 ITEM Defense Ir Integratio	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering and Integration/0302019K	<b>URE</b> Infrastruc	ture Engin	eering and	
COST (in millions)	lions)	FY 97	FY98	FY 9 9	FYOO	FY 0.1	FY02	FY03	Cost to Complete	Total Cost
CINC/JTF C4 Integr	Integration/T66	1.633	1.337	*0	0	0	0	0	0	2.970
C. Other Program	Other Program Funding Summary:	<u>FY 97</u> 0		EX98 0	EX99					
D. Schedule Profile:	.ac.				-					
FY1997 1st Qtr: 2nd Qtr: 3rd Qtr: 4th Qtr:	1st Draft of SOUTHCOM Transition 1st Draft of ACOM C4 PA&E Master 1st Draft of SOCOM C4 PA&E Master C4 PA&E Automation Support Final Draft of SOUTHCOM TRM Preliminary design of the C4 Asse C4 PA&E Automation Support Development of the C4 Assessment C4 PA&E Automation Support C5 Complete development of the C4 Assessment C6 C6 C7	SOUTHCOM Transition ACOM C4 PA&E Master SOCOM C4 PA&E Master ation Support of SOUTHCOM TRM lesign of the C4 Assent ation Support of the C4 Assessment ation Support all Summary	ition Roadmap (TRM) aster Plan Master Plan 4 Assessment Tool sment Tool C4 Assessment Tool	map (TRM) nt Tool ment Tool	_					
* Beginning FY99,	Beginning FY99, this project is being conver	being convert	ted from RDT&E to O&M.	DT&E to	O&M.					
			Pa	Page 20 of	22					

RDIGE BUD	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM Defense II Integrati	R-1 ITEM NOMENCLATURE Defense Information Infr Integration/0302019K	<b>TURE</b> Infrastruc K	cture Engin	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering and Integration/0302019K	
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
CINC/JTF C4 Integration/T66	1.633	1.337	*0	0	0	0	0	0	0 2.970

# Schedule Profile (Continued):

FY1998 1st Qtr: 1st Draft of each CINCs C4 PA&E Plan
C4 PA&E Automation Support
C4 Assessment Tool Operation
C4 PA&E Automation Support
C4 PA&E Automation Support
C4 Assessment Tool Operation
3rd Qtr: C4 PA&E Automation Support
C4 Assessment Tool Operation
4th Qtr: C4 PA&E Automation Support
C5 Assessment Tool Operation
C6 Assessment Tool Operation

CINC C4 Annual Summary

\* Beginning FY99, this project is being converted from RDT&E to O&M.

Page 21 of 22

		RDILE PROGRAM ELEMENT/PROJECT	LEMENT/PROJ	ECT COST	I BREAKDOWN	WN (R-3)			DA	DATE: February 1998
APPROPRIATION/BUDGET RDT&E, Defense Wide/07		ACTIVITY				R-1 Defen	R-1 ITEM NOMENCLATURE Defense Information Infrastruc Integration 0302019K/CINC/JTF	ENCLATUR nation In 302019K/C	RE frastructur INC/JTF C4	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering and Integration 0302019K/CINC/JTF C4 Integration/T66
A. <u>Project</u> Projec	<pre>Project Cost Breakdown: (\$Millions) Project Cost Categories</pre>	<u>wn</u> : (\$Milli. ories	ons)			FY97		FY 98	FY99	
	a. Systems I	Systems Engineering				1.633	83	1.337	*0	
TOTAL						1.633	83	1.337		
B. Budget A Suppor	Budget Acquisition History and Planning Information: Support and Management Organizations	istory and ment Organi	Planning In zations	formatic	: <b>:</b>					
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to Ex97	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Multiple Performing Activities	CPAF CPFF MIPR					1.633	1.337	0	0	2.970
Government Fun	Government Furnished Property: N/A	ty: N/A								
TOTAL PROJECT						1.633	1.337			
*Beginning FY!	*Beginning FY99, this project is being converted from RDT&E to O&M.	ct is being c	onverted fro	m RDTEE t	:0 06M.		,			
					Page 22	of 22				

RDTEE BUI	RDTEE BUDGET ITEM JUSTIF	FICATION	ICATION (R-2 Exhibit)	oit)			DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	,			R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	TURE Haul Comm	unication	ν	
COST (in millions)	FY97	FY98	FY 99	FYOO	FY01	FY 02	FY03	Cost to	Total
Total PE Cost: PE 0303126K	22.613	13.693	11.561	1.338	1.450	1.477	1.510	Contg	Contg
Commercial Satellite Communications Init./E25	7.463	0	0	0	0	0	0	0	7.463
Leading Edge Pilot Info. Technologies/E26	2.981	3.106	*0	0	0	0	0	Contg	Contg
MILSATCOM & DII Planning/E61	4.211	4.272	**0	0	0	0	0	Contg	Contg
Defense Info. Systems Network Acquisition/H20	7.496	5.867	10.333	0	0	0	0	0	23.696
DISN Systems Engineering Support/T82 ***	0	0	1.228	1.338	1.450	1.477	1.510	Contg	Contg
White House Situation Support Staff/W90 ****	0.462	0.448	0	0	0	0	0	0	.910

(CINCs), and other critical users. This PE provides for the engineering to consolidate the operational communications communications for the National Command Authorities (NCA), the Joint Chiefs of Staff (JCS), the Commanders-in-Chief networks into DISN and for the technologies, commercial equipments and service offerings to reduce the cost of the evaluation for the Defense Communications System (DCS)/Defense Information Systems Network (DISN) which provides A. Mission Description and Budget Item Justification: This program element funds system engineering and test Defense-wide communications for the day-to-day operations of the DOD and serves as the core of DOD wartime DCS/DISN and to provide valuable new information services to users. Project E25 develops and implements a commercial satellite communications system pilot worldwide DOD user and research communities. Project E61 supports the planning and decision management to provide Project E26 supports Leading Edge Pilot Services which include information for program in support of the DISN. The PE consists of 6 projects.

Page 1 of 26

RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications
responsive communications and information services to support evolving military missions. Project H20 covers DISN avstems Engineering Support	ices to support evolving military missions. Project H20 covers DISN rvice contracts. Project T82 covers DISN Systems Engineering Support

which plans and promotes an expeditious and cost effective development of needed information technology capabilities by targeting R&D efforts to DOD mission needs. Project W90 supports engineering to provide full level crisis management capabilities for the White House. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

- \* Beginning in FY 1999, Project E26, Leading Edge Pilot Information Technology is being realigned to PE 0604764K, Advanced Information Technology Services Joint Program Office.
- \*\* Beginning in FY 1999, Project E61, MILSATCOM & DII Planning is being incorporated into Project E62, Modeling & Simulation in PE 0302019K, Defense Information Infrastructure Engineering and Integration.
- \*\*\* Project T82, DISN Systems Engineering Support is not a new start. It combines Project T80, Technology Assessment and Insertion from PE 0208045K and part of Project T62, Defense-Wide C3 Architecture and Planning from PE 0302019K.
- \*\*\*\* Beginning in FY 1999, Project W90, White House Situation Support Staff efforts are realigned to the O&M appropriation.

Page 2 of 26

RDIGE B	SUDGET IN	EM JUSTIF	ICATION	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Co	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	ations		
COST (in millions)		FY97	FY98	FY 9 9	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Project E25 Commercial Satellite Communications Initiative Follow-On		7.463	0	0	0	0	0	0	0	7.463

1. Mission Description & Budget Item Justification:

communications capabilities. This program establishes a seed pilot network, a tool for networking planning, development available, such as downloading high data rate information from airborne vehicles via commercial satellites to processing of a bandwidth management capability for leased whole transponders, and validation of a concept to reduce DOD commercial (U) This project develops and implements pilot capabilities for a proof of concept using available commercial satellite satellite capabilities with the Defense Information System Network (DISN) and Defense Satellite Communications System centers, and dissemination of information to remote users. This program will demonstrate how to integrate commercial satellite telecommunications costs by bundling of individual circuit leases and by consolidating telecommunications requirements on whole transponders. The pilot network will offer a variety of services that are presently not

# (U) FY 1997 Accomplishments:

- o Expanded pilot services (\$7,463K) (1st.Qtr 4th Qtr)
  - o Validated concepts (1st Qtr 4th Qtr)

-sustainable customer base established, integration with DSCS and DISN, final reports and business plan \$7.463M Total

Acquisition Strategy: All services and equipment competitively procured.

Page 3 of 26

RDTEE E	RDIGE BUDGET ITEM JUSTIF	JUSTIF	ICATION (	ICATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1998	_
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	TURE Haul Comm	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	v	
COST (in millions)	F	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
Project E25 Commercial Satellite Communications Initiatives Follow-On	7.463	63	0	0	0	0	0	0	0	7.463
B. Program Change Summary.  Previous President's Budget (FY 1998)  Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1998 President's Budget Current Budget Submit/President's Budget (FY 1999) Change Summary Explanation: Funding: FY97 reduction due to below threshold reprogramming. Schedule: N/A	et (FY 1998) ed Value r Since FY 19 sident's Budd n: ue to below '	998 Pr get (F	President's Budget (FY 1999) shold reprogrammin	s Budget ogramming	•	EY 97 7.464 7.636 173 7.463	0 0 0	0 0		Total Cost 7.464 7.463
8	nary: N/A									

age 4 of 26

RDTGE E	SUDGET IT	EM JUSTIF	ICATION	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&&E, Defense Wide/07					R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	unication	s	
COST (in millions)		FY97	FY98	FY 9 9	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
Project E25 Commercial Satellite Communications Initiatives Follow-On		7.463	0	0	0	0	. 0	0	0	7.463

D. <u>Schedule Profile:</u>
| Fiscal Year actual and planned events by quarter.

FY 1996

FY 1997 ~

T&E milestones:

Validated Bmc/Control

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Page 5 of 26

RDTGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	COST BREAKDOWN	(R-3)		DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITEM No PE 0303126K/	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/E25/ COMMERCIAL SATELLITE COMMUNICATIONS INITI	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/E25/ COMMERCIAL SATELLITE COMMUNICATIONS INITIATIVES FOLLOW-ON
A. Project Cost Breakdown (\$Millions)				
Project cost categories	FY 97	FY 98	FY 99	
1. Travel	.025	0	0	
2. Management Support Services	.300	0		
3. Engineering & Technical Services	7.138	0	0	
Total	7.463	. 0	0	
B. Budget Acquisition History and Planning Information:	N/A			
	5			

UNCLASSIFIED

RDTGE BI	UDGET IT	EM JUSTIF	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	unication	w	
COST (in millions)		FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project E26 Leading Edge Pilot Information Technology		2,981	3.106	*0	0	0	0	. 0	Contg	Contg

which are not available from the Defense Information Infrastructure (DII) and for which customers are willing to assume some of the risk communications (voice, data, video, multimedia); and security technologies and applications in command, control, and intelligence for the worldwide DOD user and research communities. This program supports the acquisition and delivery of consolidated advanced technology technologies from R&D to widespread experimental uses, to leading edge and from leading edge to maximize the potential for migration into the DII and the National Information Infrastructure (NII). The DISA funding under this project will allow the AITS-JPO to leverage research and development funding and efforts. that exceed those capabilities currently available from the DII. The resulting services will be managed in the operational context of Leading Edge Pilot Services are information transport and value added services the single information DII, operated and maintained by DISA. The DARPA/DISA Advanced Information Technology Services Joint Program Office (AITS-JPO) will integrate advanced technology research and development efforts from DARPA and others, focus the flow of these information services in a maximally competitive environment (as cost effectively as is possible) to customers with operational needs associated with development of initial deployment. These services may include information processing, storage, and retrieval; Mission Description & Budget Item Justification:

## (U) FY 1997 Accomplishments:

Monitor candidate information system technologies and capabilities which are still in research and development for potential o Monitor candidate information system technologies and capabilities which are integration into the AITS-JPO Pilot Service portfolio (\$100K) (1st Qtr - 4th Qtr)

Participate, initiate, expedite, or collaborate in Advanced Concepts Technology Demonstrations (ACTD's) in support of leading edge (\$100K) (1st Otr - 4th Qtr) o Participate, initiatechnology services.

- o Evaluate available candidate AIT services versus user requirements and select promising technologies for pilot service (\$827K) (1st Qtr - 4th Qtr)
  - o Develop and coordinate plans and strategies for migration of Leading Edge Services into the DII. (\$950K) (1st Otr 4th Qtr) Migrate selected modeling and simulation services to the DII. (\$400K) (1st Qtr - 4th Qtr)
- Beginning FY99, this project is being realigned to PE 0604764K, AITS JPO, project T26.

Page 7 of 26

RDTGE	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	JUSTIFI	CATION (R	-2 Exhibit				DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					<b>R-1 ITEM</b> PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	unication	100	
COST (in millions)	Īτι	FY 97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Project E26 Leading Edge Pilot Information Technology	2.981		3.106	*0	0	. 0	0	0	Contg	Contg
FILOU THIOTHNACION TECHNOLOGY										

(U) FY 1997 Accomplishments (Continued):

Integrate first production key agile cell encryption devices for modeling and simulation users (\$239K) (1st Qtr - 2nd Qtr)

Enhance emerging bandwidth-aware and end-to-end security pilot services (\$165K) (1st Qtr - 4th Qtr).

Integrate ATM multicast services for modeling and simulation users (\$200K) (1st Qtr - 4th Qtr)

\$2.981M Total

(U) FY 1998 Plans:

o Develop and implement emerging technologies in order to identify potential candidates to migrate into advanced DOD-wide applications and services. (\$1,060K) (1st Qtr - 4th Qtr)

o Evaluate and implement emerging standards and protocols into pilot services network (\$1,046K) (1st Qtr - 4th Qtr)

(\$1,000K) (1st Qtr - 4th Qtr) Develop and coordinate plans and strategies for migration of leading edge services to the DII. \$3.106M Total

Acquisition Strategy: Develop and implement statements of work and task orders to support FFRDC and SETA Contracts.

ä	Program Change Summary	FY97	FY98	5004
	Previous President's Budget (FY 1998)	2.854	3.060	3.114
	Appropriated Value	3.029	3.060	
	Adjustments to Appropriated Value	048	+.046	
	Adjustments to Budget Year Since FY98 President's Budget			
	Current Budget Submit/President's Budget (FY 1999)	2,981	3.106	*0
	Change Summary Explanation:			,
	FY97 decrease due to below threshold reprogramming.			
	FY98 increase due to below threshold reprogramming.			

Beginning FY99, this project is being realigned to PE 0604764K, AITS-JPO, project T26.

Page 8 of 26

RDTSE E	RDT&E BUDGET ITEM JUSTIFI	FICATION (R	CATION (R-2 Exhibit)				DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	TURE Haul Comm	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	m	
COST (in millions)	FY 97	FY98	FY 9 9	00A3	FYOI	FY 02	FY03	Cost to Complete	Total Cost
Project E26 Leading Edge Pilot Information Technology	2.981	3.106	*0	0	0	0	0	Contg	Contg
C. Other Program Funding Summary:			<u>FY97</u> 2.658		FY98 2.736		FY99		
D. <u>Schedule Profile</u> Fiscal Year actual and planned events by quarter.	events by quarter								
			EY97 1 2 3	4	FY98 1 2 3	4	FY99		
SOW for SETA Support			×		×				

\* Beginning FY99, this project is being realigned to PE 0604764K, AITS-JPO, project T26.

Page 9 of 26

RDTGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	T/PROJECT COST BREA	KDOWN (R-3)		DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITEM NOMENCY PE 0303126K/Long Pilot Info Tech	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Pilot Info Tech	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/E26 Leading Edge Pilot Info Tech
A: Project Cost Breakdown (\$Millions)	FY97	EX98	FY99	
Project Cost Categories				
Modeling & Simulation	2.981	3.106		
Total	2.981	3.106	*0	
B: <u>Budget Acquisition History and Planning Information:</u> N/A	cormation: N/A			
* Beginning FY99, this project is being realigned to	<b>E</b> d	0604764K, AITS-JPO, project T26. Page 10 of 26	726.	

RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ITEM JUSTIE	TICATION	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM PE 0303126	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	<b>TURE</b> al Communic	ations		
COST (in millions)	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	4.211	4.272	*0	0	0	0	0	Contg	Contg

deployment of DOD information systems by performing a broad spectrum of activities in support of C41 programs. DISA has the lead in DOD for providing modeling and simulation to DOD decision makers--from the OSD level to the war fighter--with services and a suite of tools the DOD force structure and military operations, requiring greater flexibility to meet the global warfighting requirements to rapidly expect forces anywhere in the world. This effort supports the DOD communications planning and investment strategy for the successful Mission Description & Budget Item Justification: The rapid evolution of the global military environment is driving a major evolution Commerce; 2) support initial INFOSEC/IW simulation efforts to give DISA the capability to determine the impact of IW attacks on the DII; 3) provide modeling and simulation assessment of the DII's ability to support CINCs, JCS, Services, and other Federal agencies' current environment in support of the modeling and simulation efforts of DISN, DMS, IW, the DII, GCSS and GCCS; 5) investigate methods linking these models with other GOTS used in information network modeling, design and analysis; 6) explore the available COTS tools appropriate services and tools will: 1) provide modeling and analysis support to the key DISA programs and initiatives of DMS, DISN and Electronic capable of identifying key decision points required to carry out their mission in the most effective way. This work is essential to for developing a model that will be used for sizing and performance assessment of information system architecture; 7) stimulate GCCS through induction of combat models and simulation into GCCS. and emerging C4ISR mission driven information requirements; 4) enhance the functionality of GOTS tools to engender an integrated achieve the DISA goal of quality information services at an affordable cost through a deliberate decision management process. project forces anywhere in the world.

## (U) FY97 Accomplishments:

- o Integrated Communication Data Base (ICDB) (\$369K) (1st Qtr 3rd Qtr)
- 4th Qtr) o C4I Simulation Integration: Migrate to a common family of models for training, planning and assessment. (\$985K) (1st Qtr
- o Joint Staff Support: Provide analysis and decision management support to the warfighters in the realization of C41FTW. (\$1,612K) (1st o C4I/DII Assessment: Provide assessment support to DISA and the operational community. (\$465K) (1st Qtr - 4th Qtr) Qtr - 4th Qtr)
  - o Integrated Network Assessments: Assess military and commercial telecommunications alternatives to resolve programmatic issues. 4th Otr) (\$550K) (1st Qtr -
- o C4I Model: Develop a D0D-wide C4I simulator to support mission test, training and operational exercises. (\$230K) (1st Qtr 4th Qtr) \$4.211M Total
- Effective FY 1999, this project is incorporated into Project E62, Modeling and Simulation in PE 0302019K.

Page 11 of 26

RDTGE 1	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	STIFICAT	ION (R-	2 Exhibit)				DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM 1 PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	ations		
COST (in millions)	FY97		FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	4.211	4.272	72	*0	0	0	0	0	Contg	Contg

#### (U) FY98 Plans:

o Integrated Communications Data Base (ICDB) (\$459K) (1st Qtr - 4th Qtr)

o C4I Simulation Integration (\$305K) (1st Qtr - 4th Qtr)

o C4I/DII Assessment (\$538K) (1st Qtr - 4th Qtr)

o Joint Staff Support (\$1891K) (1st Qtr - 4th Qtr)

o Integrated Network Assessments (\$750K) (1st Qtr - 4th Qtr)

o C4I Model (\$329K) (1st Qtr - 4th Qtr)

\$4.272M Total

#### (U) FY99 Plans:

o This project will transfer to Program Element 0302019K, Project E62 beginning in FY 1999.

Acquisition Strategy: SETA support contract (CPFF-LOE) was competitively awarded and consists of a base year and four option years. FFRDC support is procured sole source through the sponsoring Service (e.g., the Army for MITRE)

Page 12 of 26

\* Effective FY 1999, this project is incorporated into Project E62, Modeling and Simulation in PE 0302019K.

	KUTAE BUDGET LIEM JUSTIFICATION		(R-2 Exhibit)						
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM 1 PE 030312	ITEM NOMENCLATURE 0303126K/Long Haul	RE 11 Communications	ations		
COST (in millions)	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	4.211	4.272	* 0	0	0	0	0	Contg	Contg
B. Program Change Summary									
Previous President's Budget (FY 1998)	(86)			E 4	FY97	FY98	EX99	~	
Appropriated Value				4.	4.671	4.797			
Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1998	Y 1998 Preside	President's Budget		i	460	525			
Current Budget Submit/President's Budget (FY 1999)	Budget (FY 199	(6		4	4.211	4.272	*0		
FY97 change due to below threshold reprogramming.  FY98 change due to Congressional adjustments to Defense-wide Investment Appropriation.  FY99 change is due to realignment of funds from Program Element 0303126K, Project E61 to Program Element	hange due to below thresh hange due to Congressione hange is due to realignm 0302019K, Project E62.	oold reprog al adjustme ent of fund	ramming. nts to Defe s from Pro	d reprogramming. adjustments to Defense-wide Investment Appropriation. of funds from Program Element 0303126K, Project E61	nvestment it 0303126K	Appropriat:	ion. E61 to Pro	gram Element	
<ul> <li>Other Program Funding Summary</li> </ul>									
<b>Ж</b> 30				El m	<u>FY97</u> 3.579	FY98 3.321	FY99		

\* Effective FY 1999, this project is incorporated into Project E62, Modeling and Simulation in PE 0302019K.

Page 13 of 26

RDTG	BUDGET 1	TEM JUSTIF	ICATION (F	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)				DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM 1 PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	ations		
COST (in millions)		FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning		4.211	4.272	*0	0	0	. 0	0	Contg	Contg

D. Schedule Profile

Fiscal Year actual and planned events by quarter.

FY99	1234
FY98	1234
FY97	1234

××

×

Execute option year of MITRE support contract SAIC support contract Page 14 of 26

\* Effective FY 1999, this project is incorporated into Project E62, Modeling and Simulation in PE 0302019K.

RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	(R-3)		DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Co	<b>ATURE</b> aul Communie	RE Communications/E61/MILSATCOM
A. Project Cost Breakdown (\$Millions)			
	FY97	FX98	£¥99
Project Cost Categories			
Modeling & Simulation	4.211	4.272	•
Total	4.211	4.272	
B. Budget Acquisition History and Planning Information: N/A			
* Effective FY 1999, this project is incorporated into Project E62, Modeling and Simulation in PE	ng and Simulation	in PE 0302019K.	19к.
Page 15 of 26	9		

RDT	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ITEM JUSTII	FICATION SH	EET (R-2 Ext	ibit)			DATE: February 1998	lary 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NG PE 0303126K	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	RE			
COST (in millions)		FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Project H20 Defense Information System Network (DISN) Acquisition		7.496	5.867	10.333	0	0	0	0	0	23.696

# A. Mission Description & Budget Item Justification;

transport infrastructure, this infrastructure is the primary such subset of the DII. It will seamlessly span strategic, space, and tactical domains to provide the interoperable telecommunications connectivity DISN provides the Warfighters and the Warfighting Commanders in Chief (CINCs), Joint Task Force (JTF) Commanders and Combined Task Force (CTF) Commanders with a robust C41 information directly supports national defense C4I decision-making requirements, Corporate Information Management (CIM) functional business areas, and U.S. efforts to maintain the world-wide lead in defensive voice, data, imagery, video teleconferencing, and dedicated point-to-point transmission services, and enable seamless information transfer processes. With its integrated requirements databases, DISN and value added services required to plan, implement, and support any operational missions anytime and anywhere. DISN will provide the warfighters with U.S. Government controlled and secured Service Management, Mobile Satellite System (MSS), Information Dissemination Management (IDM), DISN Architecture and Integration, DISN C4I Requirements and Assessment (ICDB), Global information warfare. DISN's primary program efforts described below are CONUS, Hawaii Information Transfer System (HITS), DEPLOYED, PACIFIC, EUROPE, Automated Tools for DISN Broadcast Service (GBS) and DISN Commercial Satellite Communication Initiative (CSCD).

## (U) FY 1997 Accomplishments:

- o MSS Security firewall design, functional definition for deployable gateway, and MSS secure handset design. (\$2,749K) (3rd Qtr 3rd Qtr)
- o Designed the initial GFI prototype to provide high bandwidth to deployed warfighter, demonstrating ATM over international transmission (E1, E3, OC-3c/STM-1, etc.), ATM for Commercial Satellite & DSCS, and ATM Tactical/Strategic Interface. (\$2,476K) (1st Qtr - 1st Qtr)
  - Developed Web based automated tools for deliberate and crisis planning. (\$100K) (1st Qtr 1st Qtr)
- Conduct operational proof-of-concept at selected sites demonstrating high bandwidth (155 Mbs OC-3c/STM-1) infrastructure with the bundling of voice, video, and data over ATM. (\$1,766K) (1st Qtr - 2nd Qtr)
- o Develop acquisition strategy for including commercial fiber in the DISN Long Haul operations and develop concept of operation for extending that infrastructure inland to support deployed forces. (\$100K) (2nd Qtr - 2nd Qtr)
  - Develop an on-call contingency GFI capability that provides information required to respond quickly to worldwide contingencies (\$100K) (2nd Qtr 2nd Qtr)
    - o Provided Technical Support to DISN Architecture & Integration Group (\$205K) (2nd Qtr 2nd Qtr)

#### \$7.496M Total

- o Develop and field early operational capability -1 (EOC-1) in Pacific Command and initiate development of EOC-2 in the Indian Ocean AOR (\$3,700K) (2nd Qtr -2nd Qtr)
  - o Project Management, Systems Engineering and Network Integration (\$1,366K) (2nd Qtr 2nd Qtr)
    - o Develop IDM systems concepts (\$188K) (1st Qtr 1st Qtr)
      - o Develop GBS systems concepts (\$188K) (1st Qtr 1st Qtr)
- o GBS/IDM Integration and Support (\$425K) (1st Qtr 1st Qtr)
  - \$5.867M Total

Page 16 of 26

RDT&E BU	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	IFICATION SI	HEET (R-2 Ex	hibit)			DATE: February 1998	ary 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N PE 0303126K	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Commu	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications			
COST (in millions)	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Project H20 Defense Information System Network (DISN) Acquisition	7.496	5.867	10.333	0	0	0	0	0	23.696

#### (U) FY 1999 Plans:

- o Complete development and fielding of EOC-2 in Indian Ocean AOR and develop and field EOC-3 in European Command (\$8,432K) (1st Qtr 1st Qtr)
  - o Project Management, Systems Engineering and Network Integration (\$1,400K) (1st Qtr 1st Qtr)
    - o Update and refine IDM systems concept (\$195K) (1st Qtr 1st Qtr)
- o Develop wideband satelite communications (gapfiller and emerging commercial) implementation (\$306K) (2nd Qtr 2nd Qtr)

\$10.333M Total

#### Acquisition Strategy:

FY97: SS Loral, Motorola, Boeing, Booz-Allen for IDM PMO start-up FY98: GSA contract to Booz-Allen for IDM PMO support FY99: GSA contract to Booz-Allen for IDM PMO support

## B. Program Change Summary

	FY97	FY98	FY99	Total Cost
Previous President's Budget (FY 1998)	7.496	6.200	008.9	20 496
Appropriated Value	7.558	6.200		
Adjustments to Appropriated Value	062	-,333		
Adjustments to Budget Year Since FY 1998 President's Budget			3.533	
Current Budget Submit/President's Budget (FY 1999)	7.496	5.867	10.333	23 696
Change Summary Explanation:				

Funding: FY 97 change due to below threshold reprogramming.

FY 98 change due to Congressional adjustment to Defense-wide Investment Appropriation. FY 99 change due to increased emphasis in this area by the Department.

RDT6	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FEM JUSTIF	CATION SHE	ET (R-2 Ex	.hibit)			DATE: February 1998	اند 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	٨				R-1 ITEM P PE 0303126	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Commu	R-I ITEM NOMENCLATURE PE 0303126K.Long Haul Communications			
COST (in millions)		FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Project H20 Defense Information System Network (DISN) Acquisition	·	7.496	5.867	10.333	0	0	0	0	0	23.696
C. Other Program Funding Summary O&M PROCUREMENT			EY97 \$15.612 \$20.002	EY98 \$31.826 \$ 9.769		EY99 \$47.243 \$19.888	Total Cost \$94.681 \$49.659			
D. Schedule Profile										
(U) FY 1997 SS Loral Contract Support Motorola Contract Award Global Fiber Initiative Contract Award	4th QTR 4th QTR 4th QTR							·		
(U) FY 1998 DSS-G IDM Contract Support GSA IDM Contract Support MITRE Support	2nd QTR 2nd QTR 1st QTR									
(U) FY 1999 DSS-G IDM Contract Support GSA IDM Contract Support SAIC Contract Support	1st QTR 1st QTR 1st QTR									
·							·			
				Page 18 of 26	f26		ŀ			

	a.	TGE PROGRAM	RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	JECT COST	BREAKDOWN	(R-3)			DATE: Fe	DATE: February 1998
APPROPRIATION/BUDGET RDI&E, Defense Wide/07		ACTIVITY				R-1 ITE PE 03031	ITEM NOMENCLATURE 303126K/Long Haul Co	1 ITEM NOMENCLATURE 0303126K/Long Haul Communications/H20/DISN	ications/H20	/DISN
A. Project (	Project Cost Breakdown	down			FY97	FY98	ωl	FY99		
Project Cost Categories (\$Millions)	Categories	s (\$Million	s)							
a. Engineer	ing and Te	a. Engineering and Technical Services	rvices		7.496	Ŋ	5.867	10.333		
Total					7.496	5.	5.867	10.333		
B. Budget Acquisition History and Planning Information	ion History and	Planning Inform	nation							
	Contract									
Government N Performing o	Method/Type or Funding	Award or Obligation	Performing Activity	Project Office		Budget	Budget	Budget	Budget To	Total
	Vehicle	Date	EAC	EAC		FY97	FY98		Complete	Program
Product Development Organizations:	Organizations:									
Other Contracts						6.037	5.491	10.145		21.673
Support and Management Organizations: MITRE Procurement Work Dire	agement Organizations: Procurement Work Directive (PWD)	ns: Sirective (PWD)				1.459	.376	.188	0	2.023
		Total				7.496	5.867	10.333	0	23.696
			·							
				Pa	Page 19 of 26	vo.				

RDTEE E	RDIÆE BUDGET ITEM JUSTIFI	M JUSTIF	ICATION (	ICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	TURE	ations		
COST (in millions)		FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
DISN Systems Engineering Support/T82		0	0	1.228*	1.338	1.450	1.477	1.510 Contg	Contg	Contg

Mission Description & Budget Item Justification:

capabilities by targeting R&D efforts to DOD mission needs and leveraging on DOD and industry developments. It provides supports Defense Information Systems Network (DISN) by: (a) addressing the fixed common-user systems, treating the long haul communications, base-level, and rear-area tactical communications as an end-to-end system with particular focus on user requirements, technology and standards, features and services, security, and network management; and (b) focusing This project plans and promotes an expeditious and cost effective development of needed information technology for the transition of new technologies into leading edge and core information services. Additionally, this project on current and future DISN security initiatives for communications.

#### (U) FY 1999 Plans:

- Engineering for Network Engineering Assessment Facility (NEAF) (1st Qtr 4th Qtr; \$200K).
- Engineering for ATM systems for Unclassified Internet Protocol Router Network (NIPRNET) and Global Combat Support Systems (GCSS) (1st Otr - 4th Qtr; \$398K).
- Validate traffic source models for specific ATM applications and develop capability to import operational topology and traffic information from ATM-based networks (1st Qtr - 4th Qtr; \$630K). \$1.228M Total

\* This project is not a new start. This project merges Technology Assessment and Insertion/T80 (PE 0208045K) and part of project Defense-Wide C3 Architecture and Planning/T62 (PE 0302019K).

Page 20 of 26

RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	GET ITE	M JUSTIF	ICATION (	R-2 Exhib	it)			DATE: Fe	<b>DATE:</b> February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	<b>rure</b> 11 Communic	ations		
COST (in millions)		FY97	FY98	FY99	FYOO	FYOI	FY02	FY03	Cost to Complete	Total Cost
DISN Systems Engineering Support/T82		0 .	0	1.228*	1.338	1.450	1.477	1.510 Contg	Contg	Contg

Program Change Summary:

FY 9.7	Ŀ	FY98
Previous President's Budget (FY98)	1	
Appropriated Value		
Adjustments to Appropriated Value		
Adjustments to Budget Year Since FY98 President's Budget		+1.228
Current Budget Submit/President's Budget (FY99)		1.228
Change Summary Explanation:		
FY99 adjustment due to realignment of project from PE 0302019K and PE 0208045K.	08045K.	

# Other Program Funding Summary: N/A

## Schedule Profile:

	4
NEAF	The state of the s
for	7
Engineering	The state of the s
Qtrs:	
All	
FY 1999:	

Engineering for ATM systems for NIPRNET and GCSS.

Develop capability to import operational topology and traffic from ATM-based networks. 4th Qtr:

\* This project is not a new start. This project merges Technology Assessment and Insertion/T80 (PE 0208045K) and part of project Defense-Wide C3 Architecture and Planning/T62 (PE 0302019K).

Page 21 of 26

	RDT&	RDT&E PROGRAM ELEMENT/PROJECT	LEMENT/PRO	JECT COST	T BREAKDOWN	10WN (R-3)	(1		Ω	DATE: February 1998	
APPROPRIATION/BUDGET RDI&E, Defense Wide/07		ACTIVITY				R-1 PE 0 Engi	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Co Engineering Support	ENCLATU ong Haul upport	R <b>E</b> Communicat	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/T62 DISN Systems Engineering Support	
A. Project C	Project Cost Breakdown:	Wn: (\$Millions)	ons)								
Systems	Systems Engineering	מ			테	FY 97	FY98	щн	FY99* 1.228		
B. Budget Ac Support	Budget Acquisition History and Planning Support and Management Organizations	istory and ment Organi	Planning Ir zations	Information:	: uc						
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Prior to	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program	
Multiple Performing Activities	CPAF CPAF MIPR							1.228	Contg	Contg	<u> </u>
TOTAL PROJECT	ROJECT							1.228			
In House Engineering & Technical Support: N/A	eering & Tech	nical Support	: N/A								
* This project is not a new start. This project mer Defense-Wide C3 Architecture and Planning/T62 (PE 03	is not a new 3 Architecture	start. This and Plannin	project mer g/T62 (PE 03	ges Techr 102019K).	ology As	sessment a	and Inser	cion/T80	(PE 020804	This project merges Technology Assessment and Insertion/T80 (PE 0208045K) and part of project	

Page 22 of 26

RDTGE BU	RDIGE BUDGET ITEM JUSTIFI	USTIFI	CATION (	CATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	TURE Haul Comm	unication	S	
COST (in millions)	FY	FY97	FY98	66X3	FY00	FY01	FY02	FY03	Cost to Complete	Total
Project W90 White House Situation Support Staff	.462		. 448	0	0	0	0	0	0	.910

A. Mission Description and Budget Item Justification:

the National Security Advisor and his staff. This effort emphasizes information exchange and display and procedures. This project is part of the National Security Information and Situation Management System (NSI & SMS). This project ensures that full level crisis management capabilities are provided to the President, Vice President,

# (U) FY 1997 Accomplishmets:

(\$462K) o Study to increase capabilities of communications systems for the White House Situation Room. (2nd Qtr - 3rd Qtr)

### (U) FY 1998 Plans:

(\$448K) (2nd Qtr - 3rd Qtr) o Continue development of Decision Support Systems for the White House Situation Room.

### (U) FY 1999 Plans:

o Effort realigned to the O&M appropriation.

Page 23 of 26

RDIGE BUDGET ITEM JUSTIFICATION (R-2	I ITEM JUSTIE	ICATION	(R-2 Exhibit)	oit)			DATE: Fe	February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM PE 03031	ITEM NOMENCLATURE 0303126K/Long Haul		Communications	S	
COST (in millions)	FY97	FY98	FY99	FY 0 0	FY 0.1	FY02	FY03	Cost to Complete	Total
Project W90 White House Situation Support Staff	.462	. 448	0	0	0	0	0	0	.910
B. Program Change Summary	·				FY97	6	FY98	FY99	
Previous President's Budget (FY 1998) Appropriated Value	()				.454		.463	.457	
Adjustments to Appropriated Value			ų,		005		015		
Adjustments to budget Year since FY 1998 Current Budget Submit/President's Budget Change Summary Explanation:		o .	Budget		. 462	•	.448	457	
Funding: FY97 reduction due to below threshold FY98 change due to Congressional adjus FY99 change due to realignment of effortschnical: N/A	to below threshold reprog Congressional adjustment realignment of effort to	reprog stment ort to	ramming. to Defense-wide Investment Appropriation. the O&M appropriation.	ise-wide Invest appropriation.	stment App	oropriati	on.		
C. Other Program Funding Summary:					at		To	Total	al
Procurement Line P-1			EY97 1.600	c	FY98 1.810	1.703	Complete Contg.		Cost Contq.
W.30			3.438		2.609	4.219	Contg.		Contg.
		Pē	Page 24 of 26	26					

RDTGE BUI	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	IFICATION	(R-2 Exhil	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	TURE Haul Comm	unication	Ø	
COST (in millions)	FY97	FY98	FY 9 9	EY 00	FYOI	FY02	FY03	Cost to Complete	Total
Project W90 White House Situation Support Staff	.462	.448	0	0	0	0	0	0	.910

D. Schedule Profile

(U) FY1997

Contract Milestones:

Contract/Study delivered (3rd qtr FY97)

(U) FY1998

Contract Milestones:

Contract/Study to be delivered (3rd qtr FY98)

UNCLASSIFIED

RDTLE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	(R-3)	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communi	Communications/W90/WHSSS
A. Project Cost Breakdown (\$Millions)		
Project Cost Categories	EY97 EY98 EY99	
a. Engineering and Technical Services	.462 .448 0	
B. Budget Acquisition History and Planning Information: N/A	tion: N/A	
		•
	Page 26 of 26	

UNCLASSIFIED

RDTGE BUDGET ITEM JUSTIF		ICATION (R-2 Exhibit)	Exhibit				DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITE Support	R-1 ITEM NOMENCLATURE Support of the NCS/P.E. 0303127K	ATURE CS/P.E. 0	303127K		
COST (in millions)	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total
Total 0303127K Cost	3.808	4.405	4.428	4.344	5.137	5.218	5.312	Cont.	Cont.
Enhanced Satellite Capability/N092	. 428	.425	.420	.420	.430	.435	.440	Cont.	Cont.
Interoperability/N088	1.558	1.706	1.723	1.689	2.427	2.483	2.557	Cont.	Cont.
Information Assurance/N094	.503	.521	.525	.525	.530	.540	.550	Cont.	Cont.
Advanced Intelligent Network/N091	1.115	1.298	1.300	1.240	1.280	1.285	1.290	Cont.	Cont.
NS/EP Telecommunications Integration Support/N095	.204	.455	.460	.470	.470	.475	.475	Cont.	Cont.
Nicoion Description and Budget Them Tontiff	1.2.5.								

Assurance supports the Public Switched Network (PSN) in mitigating hacker threats. Advanced Intelligent Network employs newly developed processing capabilities to tailor the extensive telecommunications resources of the PSN. NS/EP Telecommunications Integration provides a NASA's Advanced Communications Technology Satellite (ACTS), preparing secure voice experiments over American Mobile Satellite Corporation This program element supports Executive Order 12472 of 3 April 1984 which assigns the NCS the mission of assisting the President, the National Security Council, the Office of Science and Technology Policy, and the Office of Management and Budget, in exercising their developing satellite technologies and applications which include experiment preparation and terminal modification to experiment with require that initiatives be developed that will improve the survivability and interoperability of the commercial telecommunications test and evaluation program to assess and evaluate the operational readiness and capabilities of NS/EP telecommunications programs, evolving National Information Infrastructure will meet the needs of government NS/EP users. Enhanced Satellite Capability explores essential functions in any emergency. Additionally, this program element will support programs which will help to ensure that the wartime and non-wartime telecommunications functions and responsibilities, and coordinating the planning for, and provisioning of, systems that support national security and emergency preparedness requirements, enhance the survivability and endurability of U.S. attain this objective, there are several National Security Decision Directives which provide additional guidance to the NCS which Information commercial satellites, and provide communications support for Government agencies which have responsibilities to carry out their initiatives, and emerging technologies. This program element is under Budget Activity 07 because it involves efforts supporting National Security and Emergency Preparedness (NS/EP) telecommunications for the federal government under all circumstances. Interoperability supports the Federal Telecommunications Standards Program, and ensures interoperability among emerging government communications systems. Mobile Satellite (MSAT), and the analysis of the newly proposed low earth systems. Mission Description and Budget Item Justification operational systems development.

Page 1 of 19

RDIGE BUDGE!	RDIGE BUDGET ITEM JUSTIF	ICATION (	ICATION (R-2 Exhibit)	oit)			DATE: Fe.	<b>DATE:</b> February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIKE, Defense Wide/07				R-1 ITEM Support o (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National (NCS)/P.E.0303127K	TURE	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	ystem	
COST (in millions)	. FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total
Enhanced Satellite Capability (ESC)/N092	. 428	.425	.420	.420	.430	.435	.440	Cont.	Cont.

Mission Description & Budget Item Justification:

of new satellite communication technologies. ESC will acquire knowledge of evolving technologies; support development of National Security Telecommunications Advisory Committee (NSTAC) initiatives; evaluate new commercial satellite capabilities; assure that industry This project will provide greatly enhanced and cost-effective telecommunications for all operational environments with the incorporation Regarding acquisition is aware of NS/EP requirements and stress the importance of these features in new systems; develop concepts and architectures for acquiring advanced satellite communications service and performing test and evaluation of acquired capabilities. Regarding acquires strategy, work will continue under existing contract vehicles.

FY1997 Accomplishments:

- Analyzed and documented results of NCS Advanced Communications Technology Satellite (ACTS) High Data Rate Experiments. (\$59K) (1st Qtr - 4th Qtr) 0
- Emphasis of experimentation will be targeted toward evolving Mobile Satellite Systems and influencing their design to include NS/EP desired features. Performed experimentation of NS/EP NII requirements and summarized results. (\$225K) (1st Qtr - 4th Qtr) 0
  - Performed analysis of inventory and evaluated industry activities for the potential of meeting NS/EP requirements. (\$144K) (1st Qtr - 4th Qtr) \$.428M Total 0

FY1998 Plans:

Support development of NS/EP capabilities (e.g., priority, security) on developing mobile satellite systems. (1st Otr - 4th Qtr) (\$150K) 0

Perform testing and experimentation of NS/EP capabilities on existing and developing mobile satellite systems. (1st Qtr - 4th Qtr) (\$100K) 0

Conduct experiments utilizing emerging satellite systems to demonstrate the interoperability with other wireless systems (\$125K) (1st Qtr - 4th Qtr) and capabilities.

0

Continue project planning and research, testing, evaluation, recommendations, and implementation of new technologies. (\$50K) (1st Qtr - 4th Qtr) \$.425M Total 0

Page 2 of 19

RDIGE	BUDGET IT	EM JUSTIF	ICATION (	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)				DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Support o (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	TURE	ications 8	ystem	
COST (in millions)		FY 97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
Enhanced Satellite Capability/N092		.428	. 425	.420	.420	.430	. 435	.440	Cont.	Cont.
FY1999 Plans:			ľ							

- Validate the ability of operational and developing mobile satellite systems to support NS/EP users. 0
  - (\$100K) (1st Qtr 4th Qtr)
- Demonstrate and verify the interoperability between wireless systems, including satellite, cellular, and PCS technologies. (\$220K) (1st Qtr - 4th Qtr)
  - Continue implementation of NS/EP functional requirements in developing and planning mobile satellite systems. (\$100K) (1st Qtr - 4th Qtr) \$.420M Total 0

## B. Program Change Summary

Previous President's Budget (FY 1998)	. 428	519	FX1999	
Appropriated Value	.479	.519	1 2 .	
Adjustments to Appropriated Value	051	-,094		
Adjustments to Budget Year Since FY 98 President's Budget			- 001	
Current President's Budget (FY 1999)	.428	.425	.420	

## Change Summary Explanation

Funding: FY97 change due to below threshold reprogramming.

FY98 change due to Congressional adjustment to Defense-wide Investment appropriation.

FY99 change due to revised fiscal guidance.

Page 3 of 19

UNCLASSIFIED

RDTEE BUI	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	oit)		4	ATE: Fel	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Support (NCS)/P.	R-1 ITEM NOMENCLATURE Support of the Nationa (NCS)/P.E.0303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	nunicati	ons System	
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
Enhanced Satellite Capability (ESC)/N092	. 428	. 425	.420	.420	.430	. 435	.440	Cont.	Cont.

C. Other Program Funding Summary: N/A

#### D. Schedule Profile

FY98 - 3rd quarter: Analysis of developing satellite systems and operational mobile satellite systems applicable to NS/EP users. FY99 - 3rd quarter: Analysis of operational mobile satellite systems and their relationship to the NS/EP community. FY97 - 3rd quarter: Analysis of operational mobile satellite systems and their relationship to the NS/EP community.

RDTEE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	KDOWN (R	(R-3)		DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	nS N)	R-1 ITEM NOMENCLATURE Support of the National (NCS)/0303127K/Enhanced	a d a	Communications System Satellite Capability (N092)	
A. <u>Project Cost Breakdown</u> (\$Millions) Project Cost Categories	FY1997	FY1998		FX1999	
Engineering & Technical Service Total	.428	.425		.420	
B. Budget Acquisition History and Planning Information Performing Organizations					
Support & Management Organization Test & Evaluation Organization Total Project	Budget	Budget FY1998 .110 .315 .425	Budget . 120 . 300 . 420	Total <u>Program</u> Cont. Cont.	
Page	Page 5 of 19				

104

RDT&E BUDG	RDTEE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	FICATION	(R-2 Exhil	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Support o (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	TURE onal Commun	nications S	ystem	
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Interoperability/N088	1.558	1.706	1.723	1.689	1.706 1.723 1.689 2.427 2.483 2.557	2.483	2.557	Cont.	Cont.

# A. Mission Description & Budget Item Justification:

conducts related technical evaluations and standards development. Supports the Federal Telecommunications Standards Program. Ensures interoperability among emerging government communication systems, including information systems, by providing the required analyses to the NCS member organizations and other government agencies through the development of initial specification and correlation of standards for specific types of communication and information systems; the design of initial automated methods for application of standards to systems; the refinement and evaluation of program objectives in evolving technology environment. Regarding acquisition strategy, new This project analyzes new telecommunications technologies and their effects on interoperability of government communications and reimbursable orders will be used.

## FY1997 Accomplishments:

- Developed additional and updated techniques for reliable and secure NS/EP communications in wide-band and wireless (\$652K) (1st Qtr - 4th Qtr) networks.
- Developed additional and updated methods and proposed standards for flow controlling asynchronous transfer mode congestion (\$441K) (1st Qtr - 4th Qtr) to help ensure reliable NS/EP communications.
  - Developed analyses, methods, and standards for assessing quality of multi-media NS/EP communications. \$1.558M Total (\$465K) (1st Qtr - 4th Qtr)

#### FY1998 Plans:

- Continue development of network management standards for congestion control in NS/EP services on high speed networks. (\$450K) (1st Qtr - 4th Qtr)
- Develop analyses and contributions to standards in support of NS/EP services priority at intelligent network trigger detection points. (\$459K) (1st Qtr - 4th Qtr)
- (\$350K) (1st Qtr 4th Qtr) Conduct assessment of emerging technology and NS/EP applications.
  - Continue development of reliable and secure techniques for wireless networks and services. (\$447K) (1st Qtr - 4th Qtr) \$1.706M Total

Page 6 of 19

RDTGE BU	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	FICATION	R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM Support o (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National (NCS)/P.E.0303127K	<b>rure</b> onal Commur	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	ystem	
COST (in millions)	FY97	FY98	FY99	FY00	FYOI	FY02	FY03	FY03 Cost to Complete	Total Cost
Interoperability/N088	1.558	1.706	1.723	1.706 1.723 1.689	2.427	2.483	2.427 2.483 2.557	Cont.	Cont.

#### FY1999 Plans:

- Continue to resolve impediments to interoperability of systems supporting government communications. (\$450K) (1st Qtr - 4th Qtr) 0
- Continue to analyze network management and congestion control of emerging high-speed digital networks to identify and solve NS/EP communication issues. (\$400K) (1st Qtr - 4th Qtr)
  - Continue to assess emerging technology and NS/EP applications. (\$399K) (1st Qtr 4th Qtr)
  - Develop analyses and contributions in support of the development of video teleconferencing and multi-media standards (\$474K) (1st Qtr - 4th Qtr) \$1.723M Total 0 0

### Program Change Summary

	FY1997	FY1998	FY1999	
Previous President's Budget (FY 1998)	1.558	1.759	1.849	
Appropriated Value	1.507	1.759		
Adjustments to Appropriated Value	.051	053		
Adjustments to Budget Year Since FY 98 President's Budget			126	
Current President's Budget (FY 1999)	1.558	1.706	1.723	

### Change Summary Explanation

FY97 change due to below threshold reprogramming. Funding:

FY98 change due to Congressional adjustments to Defense-wide Investment appropriation.

FY99 change due to revised fiscal guidance.

Page 7 of 19

RDTEE BUDG	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhil	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Support (NCS)/P.	R-1 ITEM NOMENCLATURE Support of the Nation (NCS)/P.E.0303127K	<b>TURE</b> tional Co K	mmunicati	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Interoperability/N088	1.558	1.706	1.723	1.706 1.723 1.689 2.427 2.483 2.557	2.427	2.483	2.557	Cont.	Cont.

C. Other Program Funding Summary:

<u>FY1997</u> <u>FY1998</u> <u>FY1999</u> 3.092 3.677 3.884

D. Schedule Profile

OEM

FY97 - 2nd quarter: Receive report from National Institute of Standards and Technology on rapid (< 1 second) restoration of multi-megabit switched digital circuits.

FY98 - 4th quarter: Receive reports on analyses and contributions on NS/EP applications to multi-media standards. FY99 - 4th quarter: Receive reports and assessments of emerging technology for NS/EP applications.

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RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	REAKDOWN (R	(R-3)		DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 Supp (NCS	ITEN Dort 3)/03	<b>rure</b> tional Co teroperab	1 NOMENCLATURE of the National Communications System 803127K/Interoperability (NOBB)	
A. Project Cost Breakdown (\$Millions)					
Project Cost Categories	7861X.3	FY1998		FY1999	
Engineering & Technical Service	1.558	1.706		1.723	
Total Project	1.558	1.706		1.723	
B. Budget Acquisition History and Planning Information Performing Organizations					
	Budget	Budget	Budget	Total	
	FY1997	FY1998	FY1999	Program	
Test & Evaluation Organization	1.209	1.365	1.364	Cont.	_
Product Development Organization	.349	.341	.359	Cont.	
Total Project	1.558	1.706	1.723	Cont.	
	Page 9 of 19				

UNCLASSIFIED

RDTGE R	BUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	8
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Support on (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National (NCS)/P.E.0303127K	TURE	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	ystem	
COST (in millions)	ŕ	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Information Assurance/N094		.503	.521	.525	.525	.530	.540	.550	Cont.	Cont.

(PSN). The research gained from this project will be used to develop a consistent framework of guidelines that will be useful to government and industry in assuring that critical software supporting and/or controlling telecommunications switches can be trusted to This project was initiated to mitigate the hacker threat posed to NS/EP telecommunications carried via the Public Switched Network Regarding acquisition strategy, new reimbursable orders will be used. perform as required in support of the PSN.

FY1997 Accomplishments:

- Developed additional tools to identify and eliminate security vulnerabilities in large computer programs such as those used Updated previously developed tools for application to emerging computer systems. in communications systems. (\$301K) (1st Qtr - 4th Qtr)
  - Evaluated additional security tools and techniques relevant to communication systems and provided updated guidelines. (\$202K) (1st Qtr - 4th Qtr) \$.503M Total 0

FY1998 Plans:

- Research and evaluate the application of existing and emerging software packages and other tools that enhance security (\$300K) (1st Qtr - 4th Qtr) in communications and information systems that support NS/EP. 0
  - Develop additional tools and procedural guidelines for NS/EP network security. (\$221K) (1st Qtr - 4th Qtr) \$.521M Total 0

FY1999 Plans:

- Continue researching and evaluating software tools for enhancing security in NS/EP telecommunications and information (\$300K) (1st Qtr - 4th Qtr) 0
  - Continue developing tools and guidelines for protecting NS/EP systems as new threats and vulnerabilities emerge. (\$225K) (1st Qtr - 4th Qtr) \$.525M Total

Page 10 of 19

			ON THE THE	3					
RDIGE BUDGET ITEM JUSTIFICATION	ITEM JUST		(R-2 Exhibit)	_			DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Support o (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	<b>FURE</b> nnal Commun	ications S	ystem	
COST (in millions)	FY97	FY98	FY 99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Information Assurance/N094	.503	.521	.525	.525	.530	.540	.550	Cont.	Cont.
B. Program Change Summary									
			•	FY1997	FY1998	8	FY1999		
Previous President's Budget (FY 1998)	•			.503	.521	·	.525		
Appropriated Value				.503	.521	Ŧ.			
Adjustments to Appropriated Value Adjustments to Budget Year Since FY 98 President's Current Budget Submit/President's Budget (FY 1999)	98 Preside	ent's Budget 1999)	t t	ς Ο	r co	-	п С		
	441 1065	1000			70.	<del>.</del>	676.		
Change Summary Explanation Funding: N/A									
C. Other Program Funding Summary									
EY1997 FY1998 0.6M 2.673		EX1999 3.314			٠				
D. Schedule Profile									
FY97 - 4th quarter: Evaluations of security features i FY98 - 4th quarter: Evaluations of emerging software t systems. FY99 - 4th quarter: Software tools and procedures for	ty features ng software ocedures fo	in switche tools for r enhancing	s performe intrusion NS/EP net	in switches performed by the Telectools for intrusion monitoring and enhancing NS/EP network security.	elecommunic and detect ity.	ations Secion in lar	urity Anal :ge compute	in switches performed by the Telecommunications Security Analysis Center. tools for intrusion monitoring and detection in large computer and switching enhancing NS/EP network security.	ing

Page 11 of 19

RDTEE PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	KDOWN (R	-3)	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	S C N	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/Information Assurance (N094)	communications System on Assurance (NO94)
A. <u>Project Cost Breakdown</u> (\$Millions) Project Cost Categories	FY1997	FY1998	FX1999
Engineering & Technical Service	.503	.521	.525
B. Budget Acquisition History and Planning Information: N/A			
Page	Page 12 of 19		

UNCLASSIFIED

RDIGE B	UDGET IT	EM JUSTIF	ICATION	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Support o (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National (NCS)/P.E.0303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	nications S	ystem	
COST (in millions)		FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total
Advanced Intelligent Network/N091		1.115	1.298	1.300	1.240	1.280	1.285	1.290	Cont.	Cont.

enhancing connectivity and survivability of services for essential government users during periods of emergency. Advanced Intelligent
Network (AIN) is an evolving PSN capability consisting of signaling systems, switches, computer processing, databases, and transmission
media. This research will result in the utilization of these components, in a customized set of network services that can be flexibly,
rapidly, and cost effectively configured by customers upon demand. Regarding acquisition strategy, work will continue under current
contract vehicles. This project is required to employ newly developed processing capabilities to tailor the extensive telecommunications resources of the existing Public Switched Network (PSN), which includes the Local Exchange Carrier (LEC) and Inter Exchange Carrier (IEC) Networks, thus

### FY1997 Accomplishments:

- Researched and developed AIN candidate configurations of potential voice and data AIN services in support of NS/EP emerging requirements and those necessary to support emergency operations on the National Information Infrastructure (NII). (\$225K) (1st Qtr - 4th Qtr)
  - Planned for and demonstrated proof of concept strategies for offering AIN services and demonstrated interoperability across the Public Switched Network (PSN), across multiple service providers, and with other technologies such as ISDN, ATM, and (\$335K) (1st Qtr - 4th Qtr)
    - Assessed AIN survivability, reliability, interoperability, and security concerns for NS/EP voice and data applications and (\$275K) (1st Qtr - 4th Qtr) influenced industry to act on NS/EP concerns. o
      - Continued initiatives to plan demonstrations that remain current with planned industry capabilities and issues, and influence the design of AIN services to be responsive to the needs of the NS/EP community. (\$280K) (1st Qtr - 4th Qtr) \$1.115M Total 0

#### FY1998 Plans:

- Identify new intelligent network capability and set 2 and 3 standard applications for NS/EP. (\$218K) (1st Qtr - 4th Qtr) 0
  - 0
- Conduct proof of concept demonstration of new services as they apply to Government Emergency Telecommunications Service (\$645K) (1st Qtr - 4th Qtr) (GETS).

Page 13 of 19

RDTGE	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	FICATION (F	-2 Exhibit	(			DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIGE, Defense Wide/07				R-1 ITEM Support o (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	TURE onal Commun	ications S	ystem	
COST (in millions)	FY97	FY 98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Advanced Intelligent Network/N091	1.115	1.298	1.300	1.240	1.280	1.285	1.290 Cont.	Cont.	Cont.

o Assess AIN integration opportunities with Defense Information System Network (DISN). (\$435K) (1st Qtr - 4th Qtr) \$1.298M Total

FY1999 Plans:

o Conduct AIN network interoperability testing across multiple carriers. (\$640K) (1st Qtr - 4th Qtr)

o Assess AIN third party implementations for NS/EP. (\$205K) (1st Qtr - 4th Qtr)

Determine AIN applications for GETS Network Management. (\$455K) (1st Qtr - 4th Qtr) \$1.300M Total

Program Change Summary

	FY1997	FY1998	FY1999	
Previous President's Budget (FY 1998)	1.115	1.298	1.280	
Appropriated Value	1.421	1.298		
Adjustments to Appropriated Value	306			
Adjustments to Budget Year Since FY 98 President's Budget			020	
Current President's Budget (FY 1999)	1.115	1.298	1.300	

Change Summary Explanation

Funding: FY97 adjustment due to below threshold reprogramming.

FY99 change due to revised fiscal guidance.

Page 14 of 19

RDTGE BUL	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Support (NCS)/P.	R-1 ITEM NOMENCLATURE Support of the Nation (NCS)/P.E.0303127K	<b>TURE</b> tional Con K	municati	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	
COST (in millions)	FY 97	FY98	FY99	FY00	FY01	FY 0.2	FY03	Cost to Complete	Total
Advanced Intelligent Network/N091	1.115	1.298	1.300	1.240	1.280	1.285	1.290	Cont.	Cont.

Other Program Funding Summary: N/A

#### Schedule Profile

FY97 - 2nd quarter: Develop AIN Open Network Architecture and Demonstrations. FY98 - 4th quarter: AIN Integration with DISN. FY99 - 4th quarter: AIN Interoperability with GETS demonstration.

Page 15 of 19

RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	JWN (R-3)		DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NG Support of (NCS)/0303	R-1 ITEM NOMENCLATURE Support of the National C (NCS)/0303127K/Advanced I	Communications System Intelligent Network (N091)
A. <u>Project Cost Breakdown</u> (\$Millions) Project Cost Categories	27	FY1998	FY1999
Engineering & Technical Service Total	1.115 1.115	1.298	1.300
B. Budget Acquisition History and Planning Information Performing Organizations  Budget  EX1997  Support & Management Organization  Product Development Organization  Total Project  1.115	n <b>2</b>	Budget Budget FY1998 .460 .449 .840 .840 .840 1.300	Total Program Cont. Cont.
Page 16 of 19	of 19		

115

RDTEE BU	RDTÆE BUDGET ITEM JUSTIF	FICATION (R-2 Exhibit)	R-2 Exhib	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Support o (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National (NCS)/P.E.0303127K	TURE onal Commun	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	ystem	
COST (in millions)	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to	Total Cost
NS/EP Telecommunications Integration Support/N095	.204	.455	.460	.470	.470	.475	.475	Cont.	Cont.

This project will assess the readiness and capabilities of existing and planned NS/EP telecommunications programs, initiatives, services, and emerging technologies to meet national requirements. It will provide essential information for decision-making and assessment of acquisition risks and will develop test and exercise programs and procedures for evaluation of the capability of the nation's telecommunications resources to meet national security or emergency preparedness telecommunications requirements. FY1997 Accomplishments:

Evaluated exercises and training events to determine capabilities needed to respond to NS/EP emergencies. (\$204K) (1st Qtr - 4th Qtr) \$.204M Total

#### FY1998 Plans:

- Conduct and report on test and evaluation of readiness and capabilities of National Communication Systems (NCS) programs, (\$151K) (1st Qtr - 4th Qtr) plans, and procedures in accordance with NS/EP functional requirements. 0
- Provide test and evaluation as required for NCS National Level Program (NLP), primary asset, and management system support. (\$152K) (1st Otr - 4th Qtr)
  - Assess NS/EP telecommunications required features and their possible expansion for NS/EP telecommunications application. (\$152K) (1st Qtr - 4th Qtr) \$.455M Total 0

#### FY1999 Plans:

- Assess emerging technology, existing plans to transition, and the applicability of industry services and assets for NS/EP (\$156K) (1st Qtr - 4th Qtr) telecommunications demonstrations. 0
  - (\$157K) Assess the utility of NS/EP communications through associated technology demonstrations. (1st Qtr - 4th Qtr) 0
- Provide test and evaluation assessments in accordance with the NS/EP architecture and NCS strategic plan on programs, \$.460M Total initiatives, products, and services. (\$147K) (1st Qtr - 4th Qtr) 0

Page 17 of 19

RDTEE BU	UDGET I	RDIEE BUDGET ITEM JUSTIFICATION (	ICATION (R	(R-2 Exhibit)				DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Support o (NCS)/P.E	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/P.E.0303127K	<b>FURE</b> nal Commu	nications S	ystem	
COST (in millions)		FY 97	FY98	FY99	FYOO	FYOI	FY02	FY03	Cost to Complete	Total Cost
NS/EP Telecommunications Integration Support/N095		.204	.455	.460	.470	.470	.475	.475	cont.	Cont.
B. Program Change Summary										
					FY1997	FY1998	떶	FY1999		
Previous President's Budget (FY 1998)	1998)				.204	. 455		.470		
Appropriated Value	q				.204	.455				
Adjustments to Budget Year Since FY 98 President's Budget	FY 98	Presider	t's Budge	at t				010		
Current Budget Submit/President's Budget (FY 1999)	s Budg	et (FY 19	(66)		.204	.455		.460		
Change Summary Explanation: FY99	9 chan	FY99 change due to	revised	revised fiscal guidance.	uidance.					
C. Other Program Funding Summary: N	N/A									
D. Schedule Profile										
FY98 Contract Award - 1 October 1998. FY99 Contract Award - 1 October 1999.	98.									
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			Pa	Page 18 of	19					

117

RDTLE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	OWN (R-3)			DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 IT Suppor (NCS)/	ITEM NOMENCLATURE out of the Nation ()/0303127K/NS/EP	RE onal Cor P Teleco	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/NS/EP Telecomm Integration Support/N095	
A. Project Cost Breakdown (\$Millions) FY1997	161	FY1998		FV1 999	-
Project Cost Categories	i				
Engineering & Technical Service .204 Total .204	ক ক	. 455	•	.460	
B. Budget Acquisition History and Planning Information Performing Organizations					·
Budget	et	Budget	Budget	Total	
[E4]	76	FY1998	FX1999	Program	
c	0	.091	.094	Cont.	
t Organization	4	.364	.366	Cont.	-
Total Project .204	4	.455	.460		_
Page 19 of 19	of 19				
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RDIGE BUI	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	IFICATION	(R-2 Exhib	it)			DATE: Fe	DATE: February 1998	_
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Defense M	R-1 ITEM NOMENCLATURE Defense Message System/P	R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K	129K		
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to	Total Cost
Project H80, Defense Message System (DMS)	1.353	0	0	0	0	0	0	0	1.353

cost effective messaging/directory service than that which is in place today. Current support is focused on developing interoperability requirements and components/services; technology insertion and service demonstrations; and influencing The purpose of this project is to provide system engineering to secure messaging and directory service. The DMS provides the defense community with a more interoperable, secure messaging, directory, and management services through requirements definition and refinement; target component ensure that Joint Staff and OSD (C3I) validated messaging requirements are satisfied through the use of a COTS-based, industry to include DMS features as part of their standard product offerings. This program element is under budget Developmental, Initial and Final Operational Test and Evaluation (DT&E, IOT&E and FOT&E); developing transitional activity 07 because it supports operational systems development. Mission Description & Budget Item Justification:

### (U) FY 1997 Accomplishments:

o DMS Management Workstation (MWS) Prototype (\$251K) (3rd - 4th Qtr)

o Perform system lifecycle/evolution engineering to account for growth, policy and requirements changes, MISSI and commercial product changes. (\$250K) (1st - 4th Qtr)

o Develop and promote DOD/DMS requirements and positions on data communications protocol issues via military and civilian, national and international standards fora. (\$200K) (1st - 4th Qtr)

sensitive but unclassified messaging, directory, security, and service management capabilities across strategic as o Perform engineering, specification development, and deployment assistance to support LRD, IOC, and post IOC for well as tactical environments, and extending beyond DMS to include EC/EDI, GCCS/GCSS, DTS, and others. (1st - 4th Qtr)

\$1.353M Total

This project has transitioned to O&M appropriation. (U) FY 1998 Plans:

Page 1 of 3

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RDTGE BUDGET ITEM JUSTIF	TEM JUSTIF	ICATION (	(R-2 Exhibit)	vit)			DATE: Fe	February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMENCI Defense Message		ATURE System/PE 0303129K	0303129K		
COST (in millions)	FY97	FY98	FY99	FY00	FY01	FY02	FY 03	Cost to Complete	Total Cost
Project H80 Defense Message System (DMS)	1.353	0	0	0	0	0	0	0	1.353
B. Program Change Summary									
		FY97	27	FY98	FY99				
Previous President's Budget (FY 1998)		1.3	1.353	0	0				
Appropriated Value		2.5	2.532						
Adjustments to Appropriated Value		-1.179	79						
Adjustments to Budget Year Since FY 1998 President's Budget	it's Budget								
Current Budget Submit/President's Budget (FY 1999)  Change Summary Explanation:		1.353	53						
Funding: FY98 and FY99: Project has transitioned to O&M appropriation.	Project has tra	nsitioned to O	&M appropr	iation.					
C. Other Program Funding Summary									
FY97	FY98	FY99							
		39.930							
PROCUREMENT 40.322	2 43.485	43.372							
D. Schedule Profile									
FY 1997 Engineering Milestones: Finalized Tactical Standardized Prototype (4 Qtr)	cal Standardized	Prototype (4	Qtr)						
		Pa	Page 2 of	m					

RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	CT COST BREAKDOWN	(R-3)			DATE: Fe	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITE Defense	M NOMEN Message	R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K	303129K	
A. Project Cost Breakdown	EY97	FY98	ml ml	FY99		
Project Cost Categories (\$Millions) a. Engineering and Technical Services Total	1.353 1.353	0 0				
B. Budget Acquisition History and Planning Information						
Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Activity Vehicle Date EAC EAC		Budget.	Budget FY98	Budget FY99	Budget To Complete	Total Program
Product Development Organizations: Other Contracts		.251	0	0	0	.251
Support and Management Organizations: MITRE Procurement Work Directive (PWD)		1.102	0	. •	0	1.102
Total		1.353	0	0	0	1,353
Ğ	Page 3 of 3					

RDTGE BUDG	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)		·	DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMENC Minimum Essentia (MEECN) /0303131K	Minimum Essential Emerge (MEECN) /0303131K	<b>FURE</b> Rergency Co	mmunicatio	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN) /0303131K	
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to	Total Cost
Total Program Element (PE) Cost	2.208	2.242	3.061	3.237	3.437	3.490	3.597	Contg	Contg
Strategic C3 Support/T70	1.980	1.988	2.029	2.102	2.190	2.23	2.307	Contg	Contg
Contingency Planning for the President/T71	.228	.254	0	0	0	0	0	0	.491
Special Projects/T64	0	0	1.032*	1.135	1.247	1.267	1.290	Contg	Contg

the NCA and the Commanders-in-Chief (CINC) of the Unified and Specified Commands. DISA performs this task as Nuclear C3 (NC3) Systems Engineer. It specifically ensures a balanced, integrated capability is maintained. This project provides direct long range and specialized support to OSD(C3I) and the Joint Staff (JS) for determining which programs should be Command Authority (NCA) and strategic and other appropriate forces to assure adequate command and control is maintained throughout all phases of conflict and instability. This support also provides informed decision-making linkage between Communications (NC3) systems; it supports positive control of nuclear forces, and connectivity between the National supported and/or canceled, as well as supports fail safe and risk reduction. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development. This program focuses on ensuring the implementation of national policy requiring Nuclear Command, Control and

This project was realigned from PE 0302019K, Defense Information Infrastucture \* This project is not a new start. Engineering and Integration.

Page 1 of 10

RDTEE BUDG	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe.	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM NOMENC Minimum Essential (MEECN)/0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerges (MEECN) /0303131K	TURE	Mmunicatio	R-1 ITEM NOWENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K	
COST (in millions)	FY97	FY98	FY99	FYOO	FYOI	FY02	FY03	Cost to Complete	Total Cost
Strategic C3 Support/T70	1,980	1.988	2.029	1.988 2.029 2.102	2.190	2.223	2.190 2.223 2.307 Contg	Contg	Contg

communications plans, procedures, operations orders, training, equipment and system configuration from end-to-end. It includes both strategic and theater-to-national level C3 interfaces into the NC3 systems. The tests are performed in an includes mission and functional technical requirements definition; alternative designs and solutions; program policy and This project has four elements: strategic planning, operational assessments, communications plans, and engineering. procedures, operations orders and Battle Staff certification, and keeping these plans and procedures accurate as policy provides engineering guidance and participation in all NC3 system life cycle systems engineering related functions. It strengths and weaknesses and determines the best investment strategy to evolve the current NCCS to achieve the desired The second element is Operational Assessment guidance; subsystem and network integration; modeling; test and evaluation; development, deployment, installation and capability. Threats -- from terrorist activities -- to regional -- to global are considered. Fiscal constraints and other These maximize the operational readiness of the National Military Command System (NMCS) by developing communications plans, of the fielded C3 systems and weapons platforms. This assessment is the sole means for positive verification of the are the long range plans and vulnerability assessments done to ensure NC3 is always adequate under all conditions of Together, these elements perform all of the functions of the NC3 systems engineer and all of the NCA and Nuclear C3 operational setting with Joint Staff, CINC and nuclear forces worldwide. The third element of this project is to Under this element, Battle Staff proficiency is verified. The fourth element of this project This element resolves design, engineering, performance and interoperably issues for critical stress or war. It evaluates the operational capability for the Nuclear Command and Control System (NCCS), i.e., support for OSD(C3I). The first element is Strategic Planning which is done for OSD(C3I) and the Joint Staff. top level guidance are also significant factors influencing these plans. and forces change. problem isolation. strategic systems

Page 2 of 10

RDTEE BUDGE	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Feb	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM NOMENC Minimum Essential (MEECN)/0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerge (MEECN) /0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN) /0303131K	mmunicatio	ns Network	
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Strategic C3 Support/T70	.1.980	1.988	2.029	2.102	2.190	2.029 2.102 2.190 2.223 2.307 contg	2.307	Contg	Contg

### (U) FY 1997 Accomplishments:

- o Continued NC3 Operational Assessments/Positive Command and Control (1st Qtr 4th Qtr; \$1,164K).
  - o Continued selected communications plans updating and certifications (1st Qtr 4th Qtr; \$320K).
    - o Completed NC3 communications requirement for Proliferation (1st Qtr 4th Qtr; \$414K).
- o Validated new architecture to implement Commercial-Off-The-Shelf (COTS) equipment into NC3 (1st Qtr 4th Qtr;
- \$1.980M Total

#### (U) FY 1998 Plans:

- o Continue NC3 Operational Assessments/Positive Command and Control (1st Qtr 4th Qtr; \$1,073K).
  - o Continue selected communications plans updating and certifications (1st Qtr 4th Qtr; \$340K).
    - o Complete NC3 communication requirement for Proliferation (1st Qtr 4th Qtr; \$447K).
- o Validate new architecture to implement COTS equipment into NC3 (1st Qtr 4th Qtr; \$128K). \$1.988M Total

#### (U) FY 1999 Plans:

- o Continue NC3 Operational Assessments/Positive Command and Control (1st Qtr 4th Qtr; \$1,005K).
  - o Continue selected communications plans updating and certifications (1st Qtr 4th Qtr; \$545K).
    - o Complete NC3 communication requirement for Proliferation (1st Qtr 4th Qtr; \$349K).
- o Validate new architecture to implement COTS equipment into NC3 (1st Qtr 4th Qtr; \$130K).
  - \$2.029M Total

Page 3 of 10

RDTEE BUDG	RDIGE BUDGET ITEM JUSTIF	ICATION (	FICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMENC Minimum Essential (MEECN)/0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerge (MEECN) /0303131K	FURE Nergency Co	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN) /0303131K	ns Network	
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Strategic C3 Support/T70	1.980	1.988	2.029	2.102	2.190	2.23	1.988 2.029 2.102 2.190 2.223 2.307 Contg	Contg	Contg

Acquistion strategy: MITRE Corporation, McLean, VA; Electrospace Systems, Inc., Arlington, VA; Sciences Applications International Corporation (SAIC), McLean, VA; Naval Space and Warfare Systems Command (SPAWAR), Washington, DC.

	6			0,	6		
FY99	2.179			15	2.029		
FY98	2.127	2.127	139		1.988		
FY97	1.882	2.075	095		1.980		
B. Program Change Summary:	Previous President's Budget (FY98)	Appropriated Value	Adjustments to Appropriated Value	Adjustments to Budget Years Since FY98 President's Budget	Current Budget Submit/President's Budget (FY99)	Change Summary Explanation:	FY97 degreese due to below threshold reprogramming

FY97 decrease due to below threshold reprogramming. FY98 decrease due to Congressional adjustment to Defense-wide investment appropriation. FY99 decrease due to revised inflation rates.

Other Program Funding Summary:	Operation and Maintenance:
ບ່	

FY99	808
FY98	.928
FY97	1.065

Page 4 of 10

RDTGE BUI	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMENC Minimum Essential (MEECN)/0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerge (MEECN) /0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K	mmunicatio	ns Network	
COST (in millions)	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
Strategic C3 Support/T70	1.980	1.988	2.029	2.102	2.190	1.988 2.029 2.102 2.190 2.223 2.307 Contg	2.307	Contg	Contg

### Schedule Profile:

Events cited below occur in each fiscal year (1997-1999).

1st Qtr - Strategic Mobile Command Center Operation Order completed for Joint Staff (JS).

lst Qtr - Strategic Communications Assessment (Polo Hat) completed for JS.

lst Qtr - JS/CINC Staff Assistance Exercise (CINCSPACE, CINCSTRAT, National Airborne Operation Center).

OSD(C3I) "NC3 Review" Report. lst otr

Non-Strategic Communications Exercise completed for JS. 1st Otr

Final NC3 System Description completed for JS. Qtr 1st

NC3 Systems Engineer Annual Report to OSD(C3I). 2nd

JS/CINC Staff Assistance Exercise (CINCPAC). 2nd

Strategic Communications Assessment (Polo Hat) completed for JS. Non-Strategic Communications Evaluation CINCEUR. 2nd

Complete Fiber Communications System (FCS).

3rd

2nd

Strategic Communications Assessment (Polo Hat) completed for JS. 3rd

Emergency Communications Procedures CJCS Emergency Action Procedures (EAP) Vol 7 completed for JS.

Qtr - Complete Early Pentagon Connectivity Modernization.

4th

3rd

- NMCS/DOD Emergency Communications Plan completed for JS.

Page 5 of 10

	RDT	RDIGE PROGRAM ELEMENT/PROJECT	LEMENT/PROJ	ECT COS	COST BREAKDOWN	WN (R-3)			ACC .	DATE: February 1998
APPROPRIATION/BUDGET RDI&E, Defense Wide/07		ACTIVITY				R-1 Minim 03031	R-1 ITEM NOMENCLATU Minimum Essential Emer 0303131K/Strategic C3	ITEM NOMENCLATURE num Essential Emerge 131K/Strategic C3 Su	RE gency Communi Support (T70)	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/ 0303131K/Strategic C3 Support (T70)
A. <u>Project</u> Projec	Project Cost Breakdown: (	<u>س</u> : (\$Millions) ories	ons)		FY97	FY98	<b>~</b> !	FY99		
a. Sy	Systems Engineering	ering			1.980	1.988	88	2.029		
TOTAL					1.980	1.988	8	2.029		
B. Budget A Support and	B. Budget Acquisition History and Planning Information: Support and Management Organizations	istory and rganization:	Planning In s	formation	: <b>u</b> a					
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to	Budget FY97	Budget FY98	Budget FY99	Budget to <u>Complete</u>	Total Program
Multiple Performing Activities	SS/C CPAF CPFF MIPR WR					1.980	1.988	2.029	Contg	Contg
TOTAL PROJECT						1.980	1.988	2.029		
					Page 6 of 10	10				

RDTGE BU	RDIGE BUDGET ITEM JUSTIFI	JUSTIFI	CATION (	CATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Minimum E: 0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerge 0303131K	<b>TURE</b> nergency Co	mmunicatio	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN), 0303131K	MEECN) /
COST (in millions)	H	FY 97	FY98	FY99	FYOO	FYOI	FY02	FY03	Cost to Complete	Total Cost
Contingency Planning for the President (CPP)/T71		.228	.254	0	0	0	0	0	0	.491

All aspects of this project are classified and require special access. Therefore, information on this project is not contained in this document but can be obtained upon request. Funding for this project was eliminated in FY99 due to revised priorities.

### Program Change Summary:

	FY97	FY98	FY99	
Previous President's Budget (FY98)	.228	.254	.271	
Appropriated Value	.236	.254		
Adjustments to Appropriated Value	008			
Adjustments to Budget Year Since FY98 President's Budget			271	
Current Budget Submit/President's Budget (FY99)	.228	.254	0	
Change Summary Explanation:				

# C. Other Program Funding Summary:

FY97 change due to below threshold reprogramming.

FY99 decrease due to revised priorities.

Information can be provided upon request.

### Schedule Profile:

N/A

Page 7 of 10

METE PROGRAM ELEM	PROGRAM E	RDTEE PROGRAM ELEMENT/PROJECT	ECT COS'	COST BREAKDOWN	OWN (R-3)			Q	DATE: February 1998	8
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	/ITY				R-1 Minir 0303	ITEM NOM num Essent 131K/Cont	ITEM NOMENCLATURE num Essential Emerge 131K/Contingency Pla	ency Commanning fo	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/ 0303131K/Contingency Planning for the President (T71)	(MEECN) / 1)
A. <u>Project Cost Breakdown</u> : (\$Millions) Project Cost Categories	: (\$Millio	(suc		Ĺ	FY 97	FY 98	EY	FY99		
a. Systems Engineering	ing			•	.228	.254		0		
TOTAL				**	.228	.254		0		
B. Budget Acquisition History and Planning Information: Support and Management Organizations	tory and I	lanning In	formatic	: <b>u</b>						
Contractor or Contract Government Method/Type Performing or Funding CALIVILY	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office <u>FAC</u>	Prior to	Budget FY97	Budget <u>FY98</u>	Budget FY99	Budget to Complete	Total Program	
Miscellaneous					.228	.254	0	0	.491	
Government Furnished Property: N/A	: N/A									
TOTAL PROJECT					.228	.254	0			
									•	
				Page 8 of	of 10					

RDTGE B	SUDGET IT	EM JUSTIF	ICATION (	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fek	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM NOMENC Minimum Essential (MEECN)/0303131K	R-1 ITEM NOWENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K	FURE Lergency Co	mmunication	ns Network	
COST (in millions)		FY 97	FY98	FY99	FYOO	FY01	FY02	FY 03	Cost to Complete	Total
Special Projects/T64				1.032*		1.135 1.247 1.267 1.290 Contg	1.267	1.290	Contg	Contg

Therefore, information on this project is All aspects of this project are classified and require special access. not contained in this document but can be obtained upon request.

### Program Change Summary:

	FV07	2004
Previous President's Budget (FY98)	100	
Appropriated Value		
Adjustments to Appropriated Value		
Adjustments to Budget Year Since FY98 President's Budget		
Current Budget Submit/President's Budget (FY99)		
Change Summary Explanation:		
FY99 adjustment due to realignment of project from PE 0302019K.	19K.	

\*0

FY99

1.032

# C. Other Program Funding Summary:

N/N

### D. Schedule Profile:

Information will be made available upon request.

\* This is not a new start. This project is being realigned from PE 0302019K, Defense Information Infrastructure Engineering and Integration, project T64.

Page 9 of 10

	RDTEE PROGRAM EI	RDILE PROGRAM ELEMENT/PROJECT	LEMENT/PRO	JECT COS	SCT COST BREAKDOWN (R-3)	OWN (R-3)	•			DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	N/BUDGET ACT Wide/07	IVITY				R-1 Minir (MEE	ITEM NOMENCLATURE mum Essential Emerge CN)/0303131K/Special	dENCLATU tial Emer 31K/Speci	R-1 ITEM NOMENCLATURE dinimum Essential Emergency Communica (MEECN) /0303131K/Special Projects/T64	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K/Special Projects/T64	
A. Project (	Project Cost Breakdown: (\$Millions)	WD: (\$Milli	ons)			FY97	7	FY 98	FY99		
Projec	Project Cost Categories a. Systems Engin	st Categories Systems Engineering							1.032*	*.	
TOTAL									1.032		
B. Budget Ac Suppor	Budget Acquisition History and Planning Information Support and Management Organizations	istory and ment Organi	Planning In zations	ıformati	uo						
Contractor or Government Performing	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to	Budget <u>FY97</u>	Budget FY98	Budget FY99	Budget to Complete	Total Program	
MITRE	SS/CPFF							1.032	Contg	Contg	
Government Furnished Property: N/A	nished Proper	ty: N/A									
TOTAL PROJECT								1.032			
* This is not Integration.	a new start.		This project was realigned from PE	ned from		.9K, Defe	nse Infor	mation In	frastructur	0302019K, Defense Information Infrastructure Engineering and	
					Page 10	of 10					

RDIGE BU	DGET IT	EM JUSTIF	ICATION (	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)	•		DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM C4I for th	R-1 ITEM NOMENCLATURE C41 for the Warrior/0303149K	TURE '0303149K			
COST (in millions)		FY97	FY98	FY99*	FYOO	FY01	FY 0.2	FY 03	Cost to Complete	Total Cost
Total Program Element (PE) Cost				3.675	3.919	4.177	4.239	4.318	Contg	Contg
Center for Standards/T20				3.300	3.525	3.763	3.818	3.880	Contg	Contg
NMCS Subsystem Engineering/T50				.375	.394	.414	. 421	. 438	Contg	Contg

This program element is the Chairman of the Joint Chiefs of Staff (CJCS) initiative promoting joint and coalition C4IFTW's three C4I interoperability per DOD Directive 4630.5, DOD Instruction 4630.8. CJCS Instruction 6212.12 directs the Joint Staff J-6, to continuously identify, prioritize, and quickly solve Joint C4I interoperability problems. C4IFTW's three overlapping phases lead to global interoperability for US military forces deployed anywhere, on any mission, at any time, with maximum flexibility in force composition. C4I for the Warrior provides focus and visibility into resolving C4I interoperability issues. As a result, this program element is under Budget Activitity 07 because it involves efforts supporting operational systems development.

They are being realigned from other program elements which are identified under the individual project descriptions. \* Projects identified under this program element are not new starts.

Page 1 of 7

APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	IFICATION (	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	<b>m</b>	
			R-1 ITEM C4I for th	R-1 ITEM NOMENCLATURE C41 for the Warrior/0303149K	TURE /0303149K				
COST (in millions) FY97 F	FY98	FY99*	FYOO	FY01	FY 0.2	FY03	Cost to	Total	
							ana Truina	1800	_
Center for Standards/T20		3.300	3.300 3.525	3.763	3.763 3.818 3.880 Contg	3.880	Contg	Conta	

primary goal is to guide development of standards within DoD and encourage industry adoption of standards supporting DOD accomplishes this by orchestrating the development, adoption, certification and implementaton of information processing, transfer, content, and format standards within DoD. The Center will also select candidate technologies for advanced The Center serves as DOD Executive Agent for centralized management of Information Technology (IT) standards. requirements. The Center for Standards (CFS) supports the Warfighter by providing information technology standards technology demonstrations, and develop the roadmap and business case analyses for transitioning technologies into products and services which improve systems interoperability and information quality for the warfighter. leading edge services.

#### (U) FY 1999 Plans:

- Develop ATM Network-to-Network Interface Standards Profile (1st Otr 4th Otr; \$320K).
  - Development of SHF, UHF, and EHF SATCOM Standards (1st Qtr 4th Qtr; \$538K).
- Technical support of SATCOM Strategic Tactical NATO Agreement(STANAG) development (1st Qtr 4th Qtr; \$550K).
  - Technical support to Program Manager (PM), Defense Message Systems (DMS) (1st Qtr 4th Qtr; \$200K). Technical support to NATO Tactical Communications (TACOMS) 2000 (1st Qtr - 4th Qtr; \$250K).
    - Technical support to PM-Electronic Commerce (1st Qtr 4th Qtr; \$150K).
      - Development of standards for Digitized Battlefield (1st Qtr 4th Qtr; \$575K).
- DOD technical requirements for Internet Engineering Task Force (1st Qtr 4th Qtr; \$117K).
  - Combined Joint Chiefs of Staff Manuals Development (1st-4th Qtr; 600K).
    - \$3.300M Total

\*This project is not a new start. This project was realigned from PE 0208045K, C3 Interoperability, project T20.

Page 2 of

UNCLASSIFIED

ROTEE BU	RDTÆE BUDGET ITEM JUSTIFICATION (R-2	IFICATION	Exh	ibit)			DATE: Fe	February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				R-1 ITEM C4I for th	ITEM NOMENCLATURE for the Warrior/0303149K	<b>FURE</b> 0303149K			
COST (in millions)	FY97	FY98	FY99*	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Center for Standards/T20			3.300	3.525	3.763	3.818	3.880	Contg	Conta
B. Program Change Summary:				Ħ	FY 9.7	FY98	FY99		
Previous President's Budget (FY98) Appropriated Value	<b>jet</b> (FY98)							*0	
Adjustments to Appropriated Value	ted Value	roei dont (e	1000						
Current Budget Submit/Presi	Submit/President's Budget Explanation:	testdent's t (FY99)	nafana				3.300		
FY99 adjustment due to realignment	to realignment		of project from PE	0208045K.					
C. Other Program Funding Summary:	ary:								
ОбМ		ţ <del>r</del> i	FY 9 7	FY98	FY99 9.887		Total Cost Contg		
D. Schedule Profile:									
FY 1999: All Qtrs: Develop VTC s 1st Qtr: Internet Draf 2nd Qtr: Internet RFC 3rd Qtr: Advanced EHF	Develop VTC Standards Profile for LANs Internet Draft on Quality of Service ad Internet RFC on Mobile AdHoc Networking Advanced EHF SATCOM Standard	ofile for Li of Service Hoc Networ	ile for LANs and Internet and Mobile Cellular Radios of Service additions to IP layer protocols oc Networking rd	iternet an is to IP l	d Mobile ayer prot	Cellular ocols	Radios		
*This project is not a new start.	rt. This project was		realigned from PE		0208045K, C3	Interope	rability,	C3 Interoperability, project T20.	.0

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Page 3 of 7

2	RDILE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	LEMENT/PROJ	TECT COS	I BREAKDOWN	OWN (R-3)			DATE:	正: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDIKE, Defense Wide/07	ACTIVITY				R-1 C4I	ITEM NOMENCLATURE for the Warrior 0303	ENCLATU arrior 03	RE 03149K/Cente	ITEM NOMENCLATURE for the Warrior 0303149K/Center for Standards/T20	
A. Project Cost Breakdown: (\$Millions)	down: (\$Millic	ons)								
					FY 97	FY98	щ	FY99		
Project Cost Categories	egories									
a. System	Systems Engineering						ι.,	3.300*		
TOTAL							.,	3.300		
B. <u>Budget Acquisition History and Planning In</u> Support and Management Organizations	History and I	Planning Ir zations	formation:	: <u>u</u> c				·		
or or nt	pe Award or g Obligation	Performing Activity	Project Office	Prior to	Budget	Budget	Budget	Budget to	Total	
Activity Vehicle	Date	EAC	EAC	FY97	FY97	FY98	FY99	Complete	Program	
JSE C/CPFF C/CPAF	02/97						3.300	Contg	Contg	
All Other Contracts								Contg	Contg	
SUBTOTAL CONTRACTS	CONTRACTS						3.300			
In House Engineering & Technical Support: N/A	schnical Support	:: N/A								
TOTAL PROJECT							3.300			
* This is not a new start.	This project was realigned from PE 0208045K, C3 Interoperability, project T20.	. was realign	ned from 1	E 020804	sk, c3 Int	eroperab	ility, pr	oject T20.		
				Page 4	of 7					

RDIGE B	SUDGET IT	EM JUSTIF	ICATION	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM C4I for t	R-1 ITEM NOMENCLATURE C41 for the Warrior/0303149K	<b>rure</b> '0303149K			
COST (in millions)		FY 97	FY98	FY99*	FYOO	FYOI	FY 02	FY03	Cost to	Total Cost
NMCS Subsystem Engineering/T50		-		.375	.394	. 414	.421	.438	.438 Contg	Contg

Combat Support System (GCSS), and Defense Information Infrastructure (DII)). The incorporation of prototypes into Joint provides system engineering support to C4I information systems by developing near-term prototypes to satisfy CINC/Joint This approach also Task Force (JTF) operational requirements. Through this prototyping technical approach, operational requirements are assessed, system performance is measured, system interoperability is demonstrated and standard DISA products are Warrior Interoperability Demonstration (JWID) demonstrations and command exercises provides real-time assessment of premiered in an operational setting (Defense Message System (DMS), Global Command and Control System (GCCS), Global applies to assessing command center capabilities and the implications of DMS, GCCS, GCSS and DII on future command This project To accommodate rapid changes in requirements and increasing budget constraints, new approaches to reduce technological advances and identifies interoperability problems and generates associated solutions. development and integration time, as well as costs for command and control systems must be sought. center requirements.

#### U) FY 1999 Plans:

- Continuation of CINC/JTF prototype evolution including software and hardware technologies to enhance two-way communication with warfighter, command and control from the foxhole to the commander (1st Otr - 4th Qtr; \$375K).
- \$.375M Total

\* This is not a new start. This project was realigned from PE 0302016K, National Military Command System-Wide Support, project T50.

Page 5 of 7

ያ 32TCR	SUDGET I	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (	R-2 Exhib	it)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM C4I for the	R-1 ITEM NOMENCLATURE C41 for the Warrior/0303149K	<b>TURE</b> '0303149K			
COST (in millions)		FY97	FY98	FY99*	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
NMCS Subsystem Engineering/T50				.375	.394	.414	.421	.438	Contg	Contg

### Program Change Summary:

Previous President's Budget (FY98)
Appropriated Value
Adjustments to Appropriated Value
Adjustments to Budget Year Since FY98 President's Budget
Current Budget Submit/President's Budget (FY99)
Change Summary Explanation:
FY99 due to realignment of project from PE 0302016K.

+.375

FY99

**FY98** 

FY97

## Other Program Funding Summary:

Related RDT&E: Program Element #0208045K, C3 Interoperability.

### Schedule Profile:

FY1999 4th Qtr: CINC/JTF prototype evolution.

\* This is not a new start. This project was realigned from PE 0302016K, National Military Command System-Wide Support, project T50.

Page 6 of 7

	RDTGE	RDIGE PROGRAM ELEMENT/PROJECT COST	LEMENT/PROJ	ECT COS	I BREAKDOWN	OWN (R-3)			ŭ	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	BUDGET ACTI	VITY				R-1 C41 f	ITEM NOM or the Wa	ITEM NOMENCLATURE or the Warrior/0303	1 3 1 4 9 K / NMC	ITEM NOMENCLATURE for the Warrior/0303149K/NMCS Subsystem Eng/T50	
A. <u>Project Cos</u> Project C	Project Cost Breakdown: (Project Cost Categories	n: (\$Millions) ries	ns)		FY97		FY98		FY99 *		
a. Syste	Systems Engineering	ring						·	.375		
TOTAL								·	.375		
B. Budget Acquisition History and Planning Information: Support and Management Organizations Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding obligation Activity Office Pr	dget Acquisition History and Plannin Support and Management Organizations tor or Contract Method/Type Award or Performing or Funding obligation Activit Vehicle Date EAC	story and E ent Organiz Award or Obligation Date	lanning In cations Performing Activity	formatic Project Office EAC	n: Prior to	Budget FX97	Budget FY98	Budget F	Budget to	Total	
Multiple C. Performing CJ Activities CM	C/SS CPAF CPFF WR/PO								Contg	Contg	
Government Furnished Property: N/A Total Project	shed Property	7: N/A						.375			
* This is not a project T50.	a new start.		This project was r	ealignec	realigned from PE		SK, Natio	onal Mili	tary Cor	0302016K, National Military Command System-Wide Support,	Support,

RDTEE BUD	RDTEE BUDGET ITEM JUSTIFI	ICATION	CATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEN Joint Sp	R-1 ITEM NOMENCLATURE Joint Spectrum Center (JSC)/0303153K	TURE nter (JSC	) /0303153	*	
COST (in millions)	FY97	FY98	FY99*	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Joint Spectrum Center (JS1)			8.839	8.967	9.039	9.581	9.892	Contg	Contg

The contract has provision for option to renew for an additional two years (1 October 1998 through 30 September 1999 and contract(s). At the appropriate time, a request for sources will be synopsized in the Commerce Business Daily (CBD) for for strategic, theater, and tactical operations. The JSC has the responsibility for architecture and standardization of DOD automated spectrum information and management systems. Specifically, the Center designs, develops, and maintains activities and Unified Commands to ensure development and acquisition of electromagnetically compatible systems and for the effective deployment of these systems in military operations. This Center is the focal point for spectrum related The JSC mission is integral to other vital activities such as capability exists, nor is it practical to develop one, that can provide the expertise necessary to fulfill the mission Information Systems Agency (DISA). The JSC is the responsible activity for DoD spectrum management and use automation and responsibilities of the JSC. The basic period of the current cost plus award fee contract ends 30 September 1998. Mission Description and Budget Item Justification: The Joint Spectrum Center (JSC) serves as the DoD focal point DoD automated spectrum management systems, evaluation tools, and databases employed by the Unified Commands, Military The JSC provides guidance and assistance to Office of Assistant Secretary of Defense (OASD), Joint Staff, Information Warfare (IW), Command and Control (C2) Protect and other defensive C3 warfare activities as directed by support, Electromagnetic Environmental Effects (E3), and EM interference resolution assistance to operational units Joint Staff. This program element is under Budget Activity 07 because it supports operational systems development. Acquisition Strategy: Engineering support services for the JSC are provided by contract. No in-house government Secretary of Defense for Command, Control, Communications and Intelligence (ASD (C³I)), Military Departments, and Defense Agencies in planning, acquisition, training, and operations. The JSC reports operationally to Defense The JSC databases are the prime sources of information for DoD use of the EM 1 October 1999 through 30 September 2000). Full and open competition will be used for acquisition of follow-on for electromagnetic (EM) spectrum management matters in support of the Unified Commands, Joint Staff, Assistant the purpose of identifying potential sources for the JSC support requirements. including deployable support to CINC Joint Task Forces. Departments, and Defense Agencies.

\*This is not a new start. Project was realigned from Air Force PE 0303144F/PE 0303153F,ECAC/JSC, project 649E. In addition, funds were aligned from Navy for this project.

Page 1 of 5

RDTGE B	SUDGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION	(R-2 Exhik	oit)			DATE: Fe	DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Joint Sp	R-1 ITEM NOMENCLATURE Joint Spectrum Center (JSC)/0303153K	TURE nter (JSC	)/0303153	<u>×</u>	
COST (in millions)		FY97	FY98	FY99*	FYOO	FY 0.1	FY 02	FY03	Cost to Complete	Total
Joint Spectrum Center (JS1)				8.839	8.967	9.039 9.581	9.581	9.892	Contg	Contg

### FY 1999 Plans: (\$ in Millions):

- (1st Qtr 4th Qtr; Spectrum Policy and Spectrum Requirements Analysis support to OASD and Joint Staff
  - Continue development of Spectrum XXI.
- Continue development of DoD EMC databases and models and simulations

\$2,381K)

\$1,853K) \$2,147K) \$2,458K)

(1st Qtr - 4th Qtr; (1st Qtr - 4th Qtr; (1st Qtr - 4th Qtr;

- Continue E3 Program Development
  - \$8.839M Total

### Program Change Summary:

	FY97	FY98	FY99
Previous President's Budget (FY98)			*0
Appropriated Value			
Adjustments to Appropriated Value			
Adjustments to Budget Years Since FY98 President's Budget			+8.839
Current Budget Submit/President's Budget (FY99)			8.839
Change Summary Explanation:			
FY99 adjustment due to realignment of JSC from AF (PE 0303144F/DE0303152F) Product	303144F/DE	190315361	Drotoct CAOR

# 3. Other Program Funding Summary:

<u>Total Cost</u> Contg	
14.130	
867.4	
763.3	
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М30	Ambia is not a ness attach

\*This is not a new start. Project was realigned from Air Force PE 0303144F/PE 0303153F,ECAC/JSC, project 649E. In addition, funds were aligned from Navy for this project.

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Note	RDIGE BUDGET ITEM JUSTIFICATION	EM JUSTI		(R-2 Exhibit)	oit)			DATE: Fe	February 1998	
FY97   FY98   FY99*   FY00   FY01   FY02   FY03	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				it i	NOMENCLA ectrum Ce		.)/0303153	×	
# State   Stat	COST (in millions)	FY 97	FY98	*66X3	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
EY97  4 1 2 3 4 1 2 3 4 4  act Option  X  X  X  X  X  X  X  X  X  X  X  Was realigned from Air Force PE 0303144F/PE 0303153F, ECAC/JSC, project 649E.	Joint Spectrum Center (JS1)			8.839	8.967	9.039	9.581	9.892	Contg	Contg
# 1 2 3 4 1 2 3 4 4 1 2 3 4 4 1 2 3 4 4 1 2 3 4 4 4 1 2 3 4 4 4 1 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Schedule Profile									
act Option X X X X X X X X X X X X X X X X X X X		124	797					(		
x x X X X X tice X in the contract of the cont	cision to Exercise Contract Opt	ion	r ×	7	n		7			
x x X X X X tice X in the control of	Exercise Contract Option			×						
tice rvices for JSC .  was realigned from Air Force PE 0303144F/PE 0303153F, ECAC/JSC, project 649E.	cision to Exercise Contract Opt	ion				×				
rvices for JSC	Exercise Contract Option						×			
rvices for JSC	Commerce Business Daily Notice		,					×		
was realigned from Air Force PE 0303144F/PE 0303153F,ECAC/JSC, project 649E.	r engineering support services	for JSC								
was realigned from Air Force PE 0303144F/PE 0303153F,ECAC/JSC, project 649E.										
was realigned from Air Force PE 0303144F/PE 0303153F, ECAC/JSC, project 649E.								•		
was realigned from Air Force PE 0303144F/PE 0303153F,ECAC/JSC, project 649E.										
was realigned from Air Force PE 0303144F/PE 0303153F, ECAC/JSC, project 649E.										٠
was realigned from Air Force PE 0303144F/PE 0303153F,ECAC/JSC, project 649E.										
was realigned from Air Force PE 0303144F/PE 0303153F, ECAC/JSC, project 649E.	,									
was realigned from Air Force PE 0303144F/PE 0303153F, ECAC/JSC, project 649E.										
was realigned from Air Force PE 0303144F/PE 0303153F,ECAC/JSC, project 649E.	•								٠	
was realigned from Air Force PE 0303144F/PE 0303153F,ECAC/JSC, project 649E.										
The state of the s		lianed from		PE 030314	4F/5E 0303	7 6 6 6 6 7 1	501			
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Page 3 of 5

RDTEE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	ELEMENT/PROJI	PROJECT COS	T BREAKDOW	(R-	3)		DATE: February 1998	ary 1998
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Joint Sp	ITEM NOMENCLATURE		(JSC) /0303153K	
A. Project Cost Breakdown: (\$Millions)	ons)							
Project Cost Categories	-			Z	FY 1997	FY 1998	FY 1999	
a. Contractor Engineering Support	Support						8.839*	
TOTAL						•	8.839	
B. Budget Acquisition History and Planning Information: Test and Evaluation Organizations	<b>Planni</b> zations	ng Informati	<u>ion</u> : (\$Millions)	ions)			·	
or Contract Method/Type	or	Performing	Project					
Performing or Funding Obligation   Activity   Vehicle   Date   TIT BOOK   CAMPAGE   PARTIES   PARTIES	ation	Activity <u>EAC</u>	Office <u>EAC</u>	Prior to FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
					e.	6.208	Contg	Contg
All Other Contracts						2.181	Contg	Contg
SUBTOTAL CONTRACTS						8.389	Contg	Contg
In House engineering & Technical Support: N/A	pport:	N/A						
TOTAL PROJECT						8.389		
*This is not a new start. Project was realigned from aligned from Navy for this project.	realigne		rce PE 03031 Page 4 of	Air Force PE 0303144F/PE 0303153F,ECAC/JSC, project 649E.	153F, ECAC/J	ISC, projec		In addition, funds were
			r					

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	RDIGE PROGRAM	ELEME	COST BREAKDO	หN (R−3)			DATE: February	ку 1998	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	BUDGET ACTIVITY Wide/07	ťχ		R-1 ITE Joint S	ITEM NOMENCLATURE t Spectrum Center		(JSC)/0303153K		
Government Furnished Property:	nished Propert	.y:							
Item Description	Contract Method/Type or Funding	Award or Obligation <u>Date</u>	Th Delivery P. Date	Total Prior to EY97	Budget <u>FY98</u>	Budget <u>EY99</u>	Budget to	Total Program	
Test and Evaluation Property GFP (Hardware C/CPAF & Software)	ation Property c/CPAF	<b>.</b>	1Ju195-30Sep99			.450	Contg	Contg	
Subtotal Test and Evaluation TOTAL PROJECT	and Evaluation		j			.450			
		•							
*This is not a new start. Project aligned from Navy for this project		Project was realigned from project.	ed from Air Force PE 0303144F/PE 0303153F, ECAC/JSC, project 649E.	144F/PE 030:	3153F, ECAC/	JSC, project		In addition, funds were	unds wer
			Page 5 of	uri u					

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